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NORTH CAROLINA
ECONOMIC AND SOCIAL

By SAMUEL HUNTINGTON HOBBS, JR.
Department of Rural Social-Economics in
The University of North Carolina

"Prime wisdom is not to know of things remote
but that which daily lies about us."—Milton

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TO

E. C. BRANSON

CREATOR OF THE SCIENCE OF HOME-STATE
SOCIAL-ECONOMICS
PUBLIC SERVANT AND FAITHFUL FRIEND

PREFACE

Milton said, "Prime wisdom is not to know of things remote but that which daily lies about us." For fifteen years the Department of Rural Social-Economics at the University of North Carolina has been busy exploring economic and social conditions in the home state and passing the findings on to the people through the University *News Letter*, the *North Carolina Club Year-Book*, special monographs, teaching, correspondence, lectures, and in other ways. Largely through the activities of this department the economic and social conditions in the state have come to be known at least to the leadership, and through legislation and in other ways many undesirable conditions have been improved or remedied. It is generally agreed that North Carolina has enacted more social legislation within the last decade and a half than any other state, and credit for such progress is generally attributed to the fact that the people have been made familiar with the true conditions.

There are several objects behind this volume. The chief purpose has been to outline in one convenient volume, as faithfully as the author can, an economic and social interpretation of the home state for the home people. In other words, this is a "know your home state" book.

Secondly, the author feels that posterity will want to know what North Carolina looked like in 1929. This volume is as nearly an exact record of conditions as they exist in the state at the present time as the author has been able to make. No such base line has ever been prepared for this or for any other state so far as the author knows. It is his purpose to revise the volume from time to time, chiefly in order to have a record of social-economic progress.

Thirdly, North Carolinians know so many things about the state that are not true. Various agencies, some of them official, have grossly misinformed the people about our economic and social conditions. An illustration is the beautiful volume issued by the State Department of Conservation and Development, entitled *North Carolina the Fifth State Today*. By no stretch of the imagination can North Carolina be pictured as the fifth state. The present author has compiled more than a thousand tables in which the states have been ranked on some fair comparable basis, and in consolidating a large number of these tables has discovered that both the arithmetical and modal average rank of North Carolina is forty-third, or sixth from the bottom! This may not be as we would like to have it, but it is the situation as revealed by an analysis of recent reliable data. This volume therefore is an attempt to present North Carolina as she is, and not as we would like her to be or as we would like to have others think she is.

There are many people and organizations in the state who have expressed the desire for a comprehensive economic and social analysis and interpretation of North Carolina. The author hopes that the fifteen years he has given to studying the state have brought him a reasonably good understanding of it.

The State Department of Education has decided to include in the public education curriculum a course on North Carolina: Economic and Social. In the preparation of this volume the author has been in consultation with educational officials and has attempted to organize the volume so that it will serve as a source book for high school students.

"North Carolina: Economic and Social" is also the title of a course that has been taught by the author since 1917. So far as is known, this was the first course of its kind offered by any American college or university. It is taught in residence, by correspondence, and through extension classes. Indeed, one of the important purposes of this volume was to serve as a textbook for the hundreds of students who register for the course each year.

Finally, the author feels that nothing will profit North Carolinians more than studying North Carolina. Professor E. C. Branson, founder of the Department of Rural Social-Economics, creator of a science of his own, is fond of saying, "Not to know the glory that was Greece and the grandeur that was Rome is to be sadly crippled in culture; but not to know the home state is to be even more sadly crippled in competent citizenship." He who would guide the ship of state should have a thorough knowledge of the state. A safe democracy is founded on competent citizenship.

The author is deeply indebted to Dr. E. C. Branson, with whom it has been his good fortune to be associated almost from the founding of the Department of Rural Social-Economics in 1914. Dr. Branson is the foremost exponent of the "know your home state" movement. Ecology, or Regional Sociology, is today a very popular term. No man has done more to promote the idea of Regional Sociology than Dr. Branson. The home state is his field, and he has cultivated it with energy and wisdom. He is the Nation's outstanding Regional Social Engineer. This volume is therefore the natural product of close association with Dr. Branson.

The writing of the book would have been impossible except for the unexcelled storehouse of home state data available in the library of the Department of Rural Social-Economics at the University of North Carolina. Nowhere else in America is there such a vast collection of social-economic information about a single state.

Samuel Huntington Hobbs, Jr.

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NORTH CAROLINA

ECONOMIC AND SOCIAL

CHAPTER I

PHYSICAL RESOURCES OF NORTH CAROLINA: LAND, SOILS, CLIMATE, AND FORESTS

An essential background to the study of "North Carolina: Economic and Social" is a knowledge of (1) the physical resources of the state, and (2) the people, their composition and characteristics. This background will be developed in four chapters: three on physical resources and one on population. The present chapter will be concerned with land, climate, and forests.

Land Resources

Land Area and Uses. North Carolina is bounded on the north by Virginia, on the east by the Atlantic Ocean, on the south by South Carolina and Georgia, and on the west by Tennessee. It lies between 34° and 36°, 31′ north latitude, and between 75°, 30′ and 84°, 15′ longitude west from Greenwich. Its extreme length from east to west is 503 miles; its extreme width is 188 miles, while its average width is approximately 100 miles. Its frontage on the Atlantic Ocean is approximately 300 miles. The area of the state is 52,250 square miles, of which 3,670 are under water. Within the state are three clearly defined geographical and geological areas, namely, the Coastal Plain, the Piedmont, and the Carolina Highlands or Mountain. The Coastal Plain area is really divided into two distinct geographic as well as social-economic regions: the Tidewater area and the Western Coastal Plain. These regions are different not only physically, but economically and socially. A description of each will appear in connection with the chapter devoted to the areas.

The following table[1] gives the main facts concerning land and how it was being used in 1925:

Item	Acres
Land area	31,190,000
Land in farms	18,597,795
Crop land	6,832,320
Harvested 1925	5,548,808
Crop failures	146,038
Fallow or idle	1,137,474
Pasture land	2,818,748
Plowable	881,895
Woods and other	1,936,853

---

[1] Based on the Census of Agriculture, 1925.

Item	Acres
Woodland not pastured	7,090,679
Other farm land	1,856,048
Land other than farm land—owned by lumber companies, federal, state, waste land, etc.	12,592,205
Average acres per farm	65.6
Crop land per farm	24.0
Crop land per farm harvested in 1925	19.6

From this table it is seen that only a small part, less than one-fourth, of the land area of the state is considered as crop land, and less than 18 per cent of the land area was devoted to crops that were harvested in 1925. The small per cent of land area under cultivation or devoted to grazing is one of the most surprising facts about the state. The great bulk of the state is either in forests or is potential forest land. Approximately four-fifths of the land area of the state is idle, semi-idle, or devoted to forests. The relatively small amount of land devoted to agriculture is the result of: (1) poor soils, wet land, or land too rough to cultivate, and (2) the nature of our system of farming.[2] Possibly one-half of the land area of the state is capable of being brought under cultivation—more than half if population ever demands it—while practically all land in the state not being used for crops and pastures is capable of producing timber. There need be no such thing as unused land in the state. It is estimated that approximately 3,500,000 acres, chiefly in the Tidewater region, are too wet and will have to be drained before they can be used for agricultural purposes.

Elbow Room. Although North Carolina is a medium-sized state and has the second largest farm population, she is more or less a frontier state in that few states have more unused land capable of being brought under cultivation. If it is assumed that one-half of the state is capable of being utilized for crops and pastures, it is seen that our farm population could be more than doubled without reducing the present size of our cultivated farms. In other words, North Carolina could have 600,000 farms and a farm population of 3,000,000, without a reduction in cultivated acres per farm, and retaining one-half of the land area for forests and other uses. There are at least 25 counties in the state that could accommodate 3,000 or more new farm families each. There is no pressing need for more farmers in the state, but it is satisfying to realize that North Carolina has an abundance of elbow room for new farms and for home seekers when there comes to be a need for them.

According to the 1920 Census, at which time considerably more land was under cultivation than at present, the counties ranged in per cent of land area under cultivation all the way from Alleghany with 61.2 per cent to Dare with 0.4 per cent. There were only two counties with more

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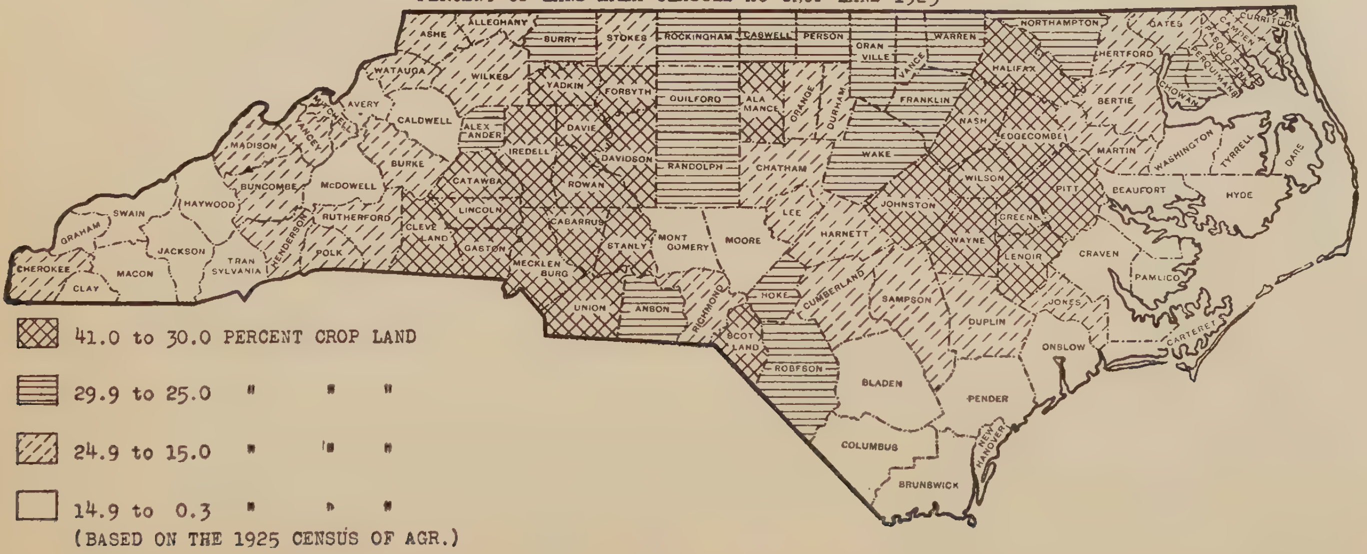
[2] Treated in chap. VI.

NORTH CAROLINA

PERCENT OF LAND AREA CLASSED AS CROP LAND 1925


ALLEGHANY
ASHE
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
VANCE
WARREN
NORTHAMPTON
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WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
MITCHELL
AVERY
CALDWELL
ALEX ANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BURKE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
LINCOLN
CABARRUS
HENDERSON
CLEVE LAND
GASTON
STANLY
MONT GOMERY
MOORE
LEE
HARNETT
JOHNSTON
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
JACKSON
TRAN SYLVANIA
POLK
MECKLEN BURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
CHEROKEE
MACON
CLAY
SCOT LAND
ROBESON
BLADEN
PENDER
COLUMBUS
NEW HANOVER
BRUNSWICK

▩ 41.0 to 30.0 PERCENT CROP LAND

▤ 29.9 to 25.0 " " "

▨ 24.9 to 15.0 " " "

☐ 14.9 to 0.3 " " "

(BASED ON THE 1925 CENSUS OF AGR.)

than half of their land area under cultivation, both mountain counties. The Piedmont and Western Coastal Plain counties have about the same per cent of their land area improved, averaging around 25 to 35 per cent. The Piedmont average is higher in per cent of improved land than is generally thought, due to more attention to livestock, grains, hay, and forage, which require land area; the Coastal Plain has less land under cultivation than is generally thought and also has the smallest farms of the state, due to excessive attention to intensive handmade cash crops, cotton and tobacco, which call for a minimum amount of land.

The Tidewater area and the southern half of the Carolina Highlands average only about 10 to 12 per cent of their land area under cultivation—the Tidewater region due to wet lands, the Carolina Highlands due to rough topography.

SOILS

North Carolina is divided into two major areas of approximately equal size: the low country or Coastal Plain, with sedimentary and mostly unconsolidated rocks, and the up-country or Piedmont and Mountains, a region of hills and hard (mostly crystalline) rocks and residual soils. The boundary between these two provinces is known as the fall line, which runs across the central part of the state and parallel with the eastern shore line. These two major portions have been further marked off into six subdivisions.[3]

1. The mountain region covers about 9,000 square miles in the west end of the state and is characterized by rugged topography and the highest mountains in eastern America. Cliffs and other rock outcrops are very limited in extent, however, and almost the whole area would be arable if it were not for the steepness of the slopes. As it is, over half the area of some counties is classed as improved land. Some of the richest soil is in wind gaps high up on the ridges, and many of the summits are not rocky barrens, but excellent pastures. The prevailing soil classes are loam, sandy loam, clay, black loam, sand, clay loam, and stony loam. A large part of the soils are classed in the Porter's series. The large amount of land classed as improved, especially in the northern half of the mountain region, is evidence of the natural fertility and productivity of this region. The southern half of the mountain region, the southwestern corner of the state, has much good land, but the region is very isolated and sparsely settled because of its rough topography and high mountains.

2. The Piedmont region covers more than one-third of North Caro-

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[3] R. M. Harper, "Some North Carolina Soil Statistics and Their Significance," *Journal of the Elisha Mitchell Scientific Society,* vol. XXXIII, no. 3.

lina. Its rocks are of many varieties, but all are metamorphic except for the Triassic areas near the eastern and northern borders. Gneiss is the commonest rock, with considerable slate in the southeastern portion. The principal soil types are sandy loam, clay, clay loam, silt loam, coarse sandy loam, fine sandy loam, loam, and meadow. There are probably two dozen soil series, but the Cecil covers more than half the area. Next come the Durham, Georgeville, Iredell, Alamance, Granville, Congaree, Appling, Caswell, and Mecklenburg. That much of this area is well suited to agriculture is shown by the fact that although it has greatest population density, it has the largest number of cultivated acres per farm dweller. The soils of this region are stiffer and tougher than those of the Coastal Plain and therefore harder to cultivate.

The soil and climatic conditions in the Piedmont are favorable for the growth of such crops as heavy tobacco, corn, wheat, and other small grains, and fruits of the temperate zone. Although the forests of this region contain several varieties of pine, the predominating forest trees are hickory, dogwood, numerous varieties of oak, and other hardwoods, all of which are hard to cut and therefore increase the difficulty of clearing the land for cultivation. Thus the topography, the soil, the climate, the kinds of produce, and the forests all united to discourage the early settlers from taking up large tracts of land; the Piedmont Plateau, therefore, became a region of small farms, highly cultivated by free white labor, which formed the basis of a democratic society.[4]

3. The Sandhill belt extends from near Sanford southwestward along the fall line into South Carolina. This region is probably of marine origin. The principal soil types are coarse sand, sandy loam, swamp, and sand. They nearly all belong to the Norfolk series. The soils of this region have little natural fertility but respond to good treatment and can be brought to a high state of productivity. This belt has experienced considerable growth within recent years, although it is still fairly sparsely settled. It is noted for peach production, trucking, and winter resorts.

4. The short-leaf pine belt covers the greater part of the Coastal Plain region. The transition from the higher and drier and more fertile portions in the north and west to the more sandy and swampy portions to the east is so gradual that it is difficult to draw any dividing lines. The leading soil types are fine sandy loam, sandy loam, swamp, sand, fine sand, very fine sandy loam, and coarse sand. About 60 per cent of the area belongs to the Norfolk series, and 15 per cent to the Portsmouth. This region has a great variety of soils. Wayne County, according to

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[4] R. D. W. Connor, *North Carolina: Rebuilding an Ancient Commonwealth*, vol. I, chap. 1.

Dr. Cobb, had the greatest variety of soils of the counties mapped by the soil survey up to a decade or so ago. The soils of this region are easily worked, and while as a rule they possess little natural fertility they respond quickly to good treatment. This vast level plain is devoted chiefly to cotton, tobacco, and corn. The farms are small, not because of topography, but due to tenancy and the nature of crops grown. Here were found most of the slave plantations before the Civil War. The land was easy to clear and well suited to cotton and tobacco. This region leads the United States in the use of commercial fertilizer, the bulk of the 1,250,000 tons used annually by the state being applied to the cotton and tobacco grown in this region. Practically no crops are grown without the use of commercial fertilizer or "guano," but when crops are properly fertilized large yields are secured.

5. In the southeastern corner of the state is the Cape Fear pine barren region. It passes imperceptibly into the adjoining short-leaf pine belt, but its boundary may be located approximately by an arc of 35 miles radius from Wilmington as the center. The topography is almost level, and there are many swamps, pocosins, and a few savannas. The soils are the poorest in the state, on the whole, due chiefly to the leaching effects of summer rains. The chief soil types are swamp and muck (largely pocosins), sand, fine sand, fine sandy loam, and very fine sandy loam. About 40 per cent belong to the Portsmouth series, and 25 to the Norfolk, with a scattering of many others. Except for New Hanover County with the port of Wilmington, also an important railroad and resort center, this is the most sparsely settled area of the state. Only the richer and higher spots are farmed. The land under cultivation gives very good yields, and much land could be reclaimed by drainage.

6. In the northeastern part of the state, east of the Nansemond escarpment, which runs almost due south from Suffolk, Virginia, is what Kerr designated as the "oak and beech flats with short-leaf pine." This region includes the Great Dismal Swamp. It is a low and flat and very swampy region, but probably has the richest soils in the state as well as the richest soils of any region so near the coast between Virginia and Louisiana. The amount of silt is very high, and the region has somewhat the aspect of an alluvial bottom. The prevailing soil types are silt loam, fine sandy loam, swamp, and loam. About 75 per cent of the area belongs to the Norfolk series, the rest, except the unclassified swamp, to the Portsmouth series. The area north of Albemarle Sound is densely settled and in a very high state of cultivation, being one of the most prosperous farming regions of the state. The region south of Albemarle Sound is very sparsely settled and only a very small percentage of the area is improved, due chiefly to the land's being too

wet. There is a large amount of land possessing great natural fertility, but not available for farming until it is drained. Only the higher spots and the lands in drainage districts are cultivated.

The following table is valuable for the information it sheds on the natural fertility of our soils. The superiority of the mountain soils, chemically, is interesting.

AVERAGE COMPOSITION MAIN TYPE SOILS IN NORTH CAROLINA[5]

Type	Pounds Plant Food in Surface 6 2/3 Inches			No. 50-Bushel Corn Crops When Removed Required to Exhaust Different Constituents of the Soil		
	Nitrogen (N)	Phosphoric Acid (P O)	Potash (K O)	(N) Nitrogen	Phosphoric Acid (P O)	Potash (K O)
COASTAL PLAIN						
Norfolk Sandy Loam	603	422	5,940	8.0	16.0	140.0
Norfolk Fine Sandy Loam	819	654	5,340	11.0	25.0	126.0
Norfolk Fine Sand	665	674	5,232	9.0	25.0	123.0
Norfolk Sand	759	857	11,038	10.0	32.0	260.0
Portsmouth Fine Sandy Loam	1,400	481	9,565	19.0	18.0	225.0
Portsmouth Sandy Loam	2,140	463	7,140	29.0	18.0	168.0
Portsmouth Fine Sand	3,874	417	5,198	52.0	16.0	122.0
Coxville Fine Sandy Loam	1,360	600	1,740	18.0	23.0	41.0
Muck	3,704	1,735	8,019	50.0	66.0	189.0
PIEDMONT REGION						
Cecil Sandy Loam	801	571	49,260	11.0	22.0	1,159.0
Cecil Clay Loam	1,179	819	8,183	16.0	31.0	193.0
Cecil Clay	1,285	1,450	17,743	17.0	55.0	418.0
Iredell Loam	903	2,840	4,849	12.0	107.0	114.0
Mecklenburg Clay	1,307	2,851	10,118	18.0	108.0	238.0
Granville Sandy Loam	614	654	16,275	8.0	25.0	383.0
Durham Sandy Loam	434	302	6,337	6.0	11.0	149.0
MOUNTAIN REGION						
Toxaway Loam	3,160	3,320	33,600	43.0	125.0	791.0
Porter's Sandy Loam	2,394	1,152	64,853	32.0	44.0	1,526.0
Porter's Loam	2,010	2,330	38,285	27.0	88.0	901.0
Porter's Clay	1,454	860	12,416	20.0	33.0	292.0

The table on the next page presents some interesting data:

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[5] Compiled by C. B. Williams and W. F. Pate, in *Fertilizer Needs of North Carolina Soils.* Extension Circular.

SUMMARY OF SOIL AND OTHER FACTS ABOUT NORTH CAROLINA[6]

	Mountains	Piedmont	Sandhills	Short-Leaf Pine Belt	Cape Fear Region	Do. Without New Hanover County	Oak and Beech Flats		Up-Country	Low Country	Whole State	Whole U. S.
							S.	N.				
Inhabitants Per Sq. Mile	36.4	60.4	33.0	42.0	34.0	18.6	41.6	13.7	51.9	38.7	45.3	30.9
Per Cent White	91.7	70.0	62.0	52.6	52.2	56.4	54.4	69.0	75.6	53.8	68.0	88.9
Improved Land, Per Cent	28.0	37.2	15.0	27.2	8.1	8.2	28.2	6.8	33.7	23.2	28.3	25.1
Improved Land Per Inhab.	4.9	5.6	3.0	4.1	1.5	2.8	4.4	3.3	4.1	3.8	4.0	5.2
Fertilizer Per Acre	.13	1.06	1.88	2.67	1.21	.99	1.39	.88	.80	2.47	1.39	.24
Per Cent Evergreens	15	40	60	73	78	. . .	38	?	30	70	51	?
SOIL CLASSES												
Rock Outcrop, etc.	1.0	0.1	. . .	. . .	. . .		. . .	. . .	0.4	. . .	0.2	?
Coarse Sand	. . .	. . .	70.1	2.0	. . .		. . .	. . .	. . .	5.5	2.8	5.0
Sand, etc.	5.4	. . .	6.8	12.3	20.3		. . .	. . .	1.5	12.4	7.0	
Fine Sand	. . .	0.1	. . .	4.4	19.1		2.0	. . .	0.0	6.1	3.2	4.2
Stony Sandy Loam, etc.	. . .	0.3	1.9	0.0	. . .		. . .	. . .	0.2	0.1	0.2	?
Stony Loam, etc.	2.0	1.9	. . .	. . .	. . .		. . .	. . .	1.9	. . .	0.9	?
Coarse Sandy Loam	. . .	8.6	0.3	1.7	0.3		. . .	. . .	6.3	1.4	3.8	10.2
Sandy Loam	20.6	31.6	11.7	28.2	3.8		. . .	. . .	28.6	21.8	25.2	
Fine Sandy Loam	1.6	7.3	. . .	29.9	15.3		26.3	. . .	6.0	25.7	16.0	16.2
Very Fine Sandy Loam	. . .	. . .	. . .	2.1	13.7		. . .	. . .	. . .	3.6	1.8	
Loam	42.7	3.8	0.3	0.9	3.1		14.3	. . .	14.2	2.0	8.0	17.4
Silt Loam	. . .	12.2	. . .	1.7	1.8		40.0	. . .	9.0	4.0	6.4	27.0
Silty Clay Loam	. . .	1.9	. . .	. . .	. . .		. . .	. . .	1.4	. . .	0.7	10.7
Clay Loam	4.9	14.3	. . .	0.0	. . .		. . .	. . .	11.9	0.0	5.8	
Black Loam	8.4	. . .	. . .	. . .	. . .		. . .	. . .	2.2	. . .	1.1	?
Clay	12.1	14.9	. . .	1.8	0.0		. . .	. . .	14.2	1.4	7.6	9.3
Swamp, etc.	1.1	3.0	9.0	15.0	20.6		17.4	. . .	2.5	15.6	9.2	?
Marsh	. . .	. . .	. . .	?	1.9		?	. . .	. . .	0.3	0.1	?

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[6] Compiled by R. M. Harper, *op. cit.*, in 1917. Population, improved land, and fertilizer facts are for 1910. Population facts are relatively about the same today. Percentage of land improved has generally declined. Fertilizer used has greatly increased in amount and value. Other facts are unchanged.

There is very little land in North Carolina that can be "cropped" for any long period of time without exhausting the accumulated plant food. We have the "makings" of highly productive land, but it can be brought up to a high state of productivity and kept there only by a scientific system of crop rotation, usually involving livestock, in which plant food is restored to the soil, or by the use of enormous quantities of commercial fertilizer, or by both combined. The centuries of more or less extractive agriculture have depleted the original supply of chemicals essential to plant growth. Many millions of acres now abandoned or in second growth forests were once under cultivation, much of it originally the best land in the state. Probably more than half of the state has at one time or another been under cultivation, while less than a fourth of the land area is under cultivation today.

CLIMATE

Among the real assets of North Carolina is her climate. The state is favorably located in a geographic area that is almost ideal when all climatic factors combined are considered in terms of their economic values. Taking all factors into consideration—extremes of heat and cold, length of growing season, amount and regularity of rainfall, clear days, absence of storms, and so on—North Carolina averages up about as well as any area that can be presented. In fact our climate is relatively far superior to the natural fertility of our soils. While there are climatic variations, they are not extreme.

Variations of heat and cold, of moisture and dryness, within extremes not too great, are essential to the best development of vegetable as well as animal life. Man, especially, requires the inspiration of the changing seasons, the summer, warm enough to assure the rewards of labor by the abundant yield of the fruits of the soil, the winter, with its bracing cold, giving a period of rest and renewal of vigor. . . .

North Carolina lies on the same parallel of latitude as the central Mediterranean basin, that climatically most favored region of the globe. Though this position in the warm temperate zone determines the chief climatic features of the state, these are modified by various causes, most important of which are the proximity of the ocean in the east and the mountain system in the west. The state is naturally divided into three regions: the Coastal Plain, Piedmont Plateau and Mountain. The effect of the prolongation of the first into the Atlantic is to give the climate of that region a more insular or marine character, the effect of the presence of the sea being to lessen the changes in temperature both diurnal and seasonal and to increase the amount of precipitation. Contrary to the prevailing impression, the nearness of the Gulf Stream has a minimum effect on the climate in the east, both because the Gulf

Stream is separated from the land by fifty miles of cold water, and because the prevailing winds are from the southwest or northeast and do not blow the moist air of the Gulf Stream over the land, as is often stated. The annual mean temperature of Southport, situated in the southeast corner of the state is 64 degrees. Here vegetation of semi-tropical origin, as the palmetto and magnolia, flourishes and rice is cultivated. The decrease in annual mean temperature towards the north is only to 59 degrees at Coinjock and Weldon. The land is level and fertile, and the earlier and more rapid development of vegetation has led to one of the most important industries of the state, that of truck farming. The shipments of truck and strawberries to northern markets begin before the middle of April.

On the other hand in the Mountain region the influence of elevation predominates; the land rises in summits higher than any east of the Mississippi River; the summers are cooler, the winters more severe, but the dryness of the air renders the climate more salubrious. The highest point in the Blue Ridge, Mount Mitchell (elevation 6,711 feet), has probably a mean annual temperature of 45 degrees, but the annual mean temperature at Asheville (elevation 2,250 feet) which is 55 degrees, is nearer the average for the district. The white pine and spruce, whose natural habitat is lower Canada, are abundant in the forests of the Blue Ridge. There are many picturesque and charming valleys, looked down upon by lofty peaks, which have a climate as mild as the less elevated Piedmont region on the east of the range. In certain mountain localities occur the remarkable thermal or frostless belts, regions where the season is known to be a month earlier in spring and later in autumn than in the valley below them, and where, above and below, frost works its blighting effect, leaving in vivid contrast horizontal belts of untouched foliage and blooming flowers. The Blue Ridge acts also as a barrier to all except the most severe cold waves from the northwest, which frequently advance around the south end, affecting the Gulf states before they reach North Carolina.

Intermediate between these sections may be found all gradations in climate, as in soil, products and scenery, suited to every individual taste.[7]

The mean average temperature of the state varies from 63° in the southeastern area from Southport to Beaufort, to 50° in the northwestern corner of the state. The bulk of the state has a mean average annual temperature of from 57° to 60°, and no section suffers from extremes of heat or cold. Our average temperature is about 15° above that of the Pennsylvania-Massachusetts section. Our July normal is about the same as the July normal for New York, while our January normal is around 15° to 20° above the New York normal for January. Our warmer winters give us great advantages in cheaper living costs and in unhampered transportation. A Southerner, unless he has lived in the North, is not likely to appreciate the comfort as well as the economic advantages of our mild winters.

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[7] *North Carolina: The Land of Opportunity,* chap. on Climate by L. A. Denson.

In the number of fair days North Carolina compares very favorably with any other state. Our winter resorts are the product of "Carolina sunshine." Golf, polo, and tennis are played throughout the winter in North Carolina. Golf can be played upon an average at least four out of every five days even during January and February.

An unfamiliar advantage of North Carolina is that in the winter our days are about 50 minutes longer than in the Pennsylvania-Massachusetts section, while in the summer, when the sun's rays are enervating and too much sunshine is a liability, the sun shines about 50 minutes less in North Carolina than in the section referred to above. Thus our days and nights are more nearly uniform in length throughout the year, our longer winter days being especially advantageous.

From records extending over a period of 42 years the mean annual temperature of the state has been determined to be 59° Fahrenheit. The means for the three regions for the different seasons of the year are as follows:

	SPRING	SUMMER	AUTUMN	WINTER	YEAR
Coastal Plain	60	77	63	44	62
Piedmont Plateau	59	77	60	42	60
Mountain	54	71	56	38	55
For the State	58	75	60	42	59

In the summer months the southern portion of the Piedmont Plateau presents higher monthly means and greater extremes than either the Coastal or the Mountain regions, probably in part due to the sandy nature of the soil. The warmest month is July, and a few stations sometimes have for that month a mean of over 80°; the coldest month is January, and in the mountains the mean for that month sometimes is as low as 30°. The extremes in temperature for the state are considerable, but rarely does the temperature reach zero, except during such extraordinary cold periods as occurred in 1899 and 1917. During a normal winter the minimum temperature in the central portion of the state will sink to 10° or 12°, but such cold is usually of very short duration. During a normal summer the temperature will perhaps on two or three days reach 100°.

In respect to temperature Dr. Kerr stated: "Middle and eastern North Carolina correspond to middle and southern France, and western North Carolina to northern France and Belgium. All the climates of Italy from Palermo to Milan and Venice are represented."

Rainfall. The normal average precipitation for North Carolina is 50.06 inches. The state therefore forms the northeastern limit of that region in the United States characterized by the largest amount of rainfall, the center of which lies in the middle Gulf coast. Long records show a belt of minimum precipitation extending through the Piedmont Plateau; at the same time certain valleys west of the divide also have a small amount. On the east coast the average is 55 inches, and over the southern portions of the Mountain region the annual precipitation becomes very large, over 80 inches at Highlands. No station has a normal less than 40 inches.

The averages for the different regions are as follows:

	Spring	Summer	Autumn	Winter	Year
Coastal Plain	10.94	17.38	9.62	10.44	48.38
Piedmont Plateau	11.37	16.00	8.85	11.00	47.22
Mountain	13.38	16.55	10.67	13.47	54.07
For the State	11.88	16.85	9.77	11.56	50.06

One advantage must not pass unnoticed, namely, that the rainfall is fairly uniformly distributed throughout the year, and that during those months when growing crops require the most moisture, the amount is greatest. The largest amounts occur in July and August, when the averages for the state are respectively 6.10 and 5.63 inches; the least amounts occur in October and November (3.51 and 2.39 inches). Our uniform rainfall is equally valuable in connection with the development of electric energy by water power, where a steady flow of water is essential.

As illustrating extreme years with respect to total precipitation, it may be mentioned that the wettest year recorded occurred in 1877, with an average of 64.88 inches for the state. September of that year had the only average of over 10 inches for one month. During the year 1911 the total annual rainfall was 42.65 inches, which is the least on record.

The following table gives a complete record of climatological data for the state from 1887 through 1928[8] and tells more than could be told in many pages. The mean temperatures for July and January have been inserted. These columns show that North Carolina is not excessively hot during the warmest month or very cold during the coldest month. It will also be noticed that the mean temperatures for the extreme months and for the years vary very little.

Vitally bound up with climate is the length of the growing season. There is a difference of about 30 to 40 days in the date of killing frosts from the coast to portions of the mountains. No region of the state suffers from a short growing season. The growing season ranges from 240 days along the coast to about 200 days in the mountain region. The great bulk of the state has a growing season of 210 days or better.

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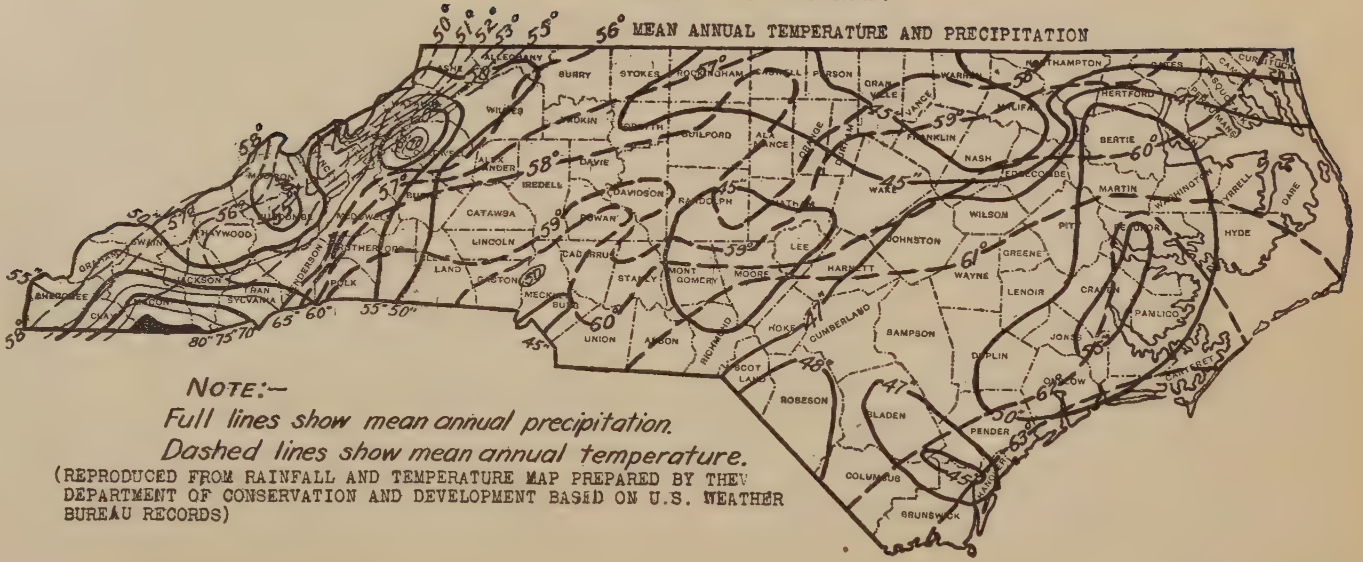
[8] From *Climatological Data,* vol. XXXIII, no 13, supplemented by data from vol. XXXIII, no. 7, and vol. XXXIV, no. 1. Maximum and minimum refer to highest and lowest temperature recorded in the state during the year.

ANNUAL CLIMATOLOGICAL DATA FOR THE STATE

Year	Temperature					Average Precipitation	Number Days			
	Mean July	Mean January	Mean Year	Minimum	Maximum		Rainy	Clear	Partly Cloudy	Cloudy
1887	80.3	38.2	59.1	107	—4	52.09	130	126	143	96
1888	77.7	40.8	59.0	103	6	54.98	121	129	122	115
1889	77.1	43.2	59.4	100	6	50.76	113	132	112	121
1890	76.2	50.5	60.7	103	4	46.49	107	135	125	105
1891	74.2	41.6	58.7	100	3	54.55	126	139	100	126
1892	76.0	38.1	57.6	105	—5	47.04	110	152	106	108
1893	78.4	30.2	57.9	104	—17	52.66	108	155	101	109
1894	76.2	43.7	59.6	104	—10	46.57	108	152	112	101
1895	75.2	38.9	57.4	104	—18	50.23	108	160	107	98
1896	77.4	38.7	59.6	105	—10	47.54	93	165	110	91
1897	77.2	37.4	59.3	103	—12	46.06	103	165	96	104
1898	77.7	44.3	59.4	104	—5	50.04	111	154	104	107
1899	76.5	40.5	58.6	106	—19	52.08	106	169	94	102
1900	79.2	40.5	59.9	107	—6	48.40	94	170	96	99
1901	78.8	40.8	57.5	105	—9	62.66	100	175	90	100
1902	78.6	38.2	58.8	107	0	44.46	97	170	99	96
1903	78.1	40.0	58.5	102	—7	50.13	97	162	98	105
1904	75.9	36.0	57.1	103	—8	43.27	96	171	95	100
1905	77.3	36.3	58.3	105	—8	51.94	110	163	91	111
1906	75.6	43.9	59.9	101	—15	59.53	124	152	96	117
1907	78.5	48.1	59.1	102	5	48.64	105	166	98	101
1908	77.2	39.4	59.6	102	—4	57.79	105	174	103	89
1909	75.9	45.7	59.4	100	—5	47.78	101	195	89	81
1910	77.2	40.8	58.3	99	—3	48.42	111	181	92	92
1911	76.7	45.5	60.4	105	5	42.65	108	172	99	94
1912	75.8	35.0	58.6	104	—9	47.27	109	175	95	96
1913	78.2	48.5	59.9	106	2	52.37	107	177	91	97
1914	76.7	43.5	58.5	106	—2	47.09	105	173	93	99
1915	77.6	41.0	58.9	103	3	50.09	100	184	91	90
1916	76.0	47.2	59.2	102	—4	50.91	112	179	97	90
1917	76.1	44.5	57.0	101	—21	49.85	112	176	95	94
1918	73.0	31.6	58.6	104	—11	50.98	108	172	92	101
1919	76.6	42.5	59.4	101	—7	48.80	101	181	93	91
1920	75.3	40.1	57.5	102	—10	56.67	113	165	95	106
1921	77.6	42.3	60.8	104	7	42.92	104	166	103	96
1922	76.8	39.8	60.3	100	—1	56.88	119	155	100	110
1923	75.6	44.0	59.2	104	—1	45.11	106	159	108	98
1924	74.5	39.6	57.5	105	—12	54.57	106	180	87	99
1925	78.0	40.8	59.9	108	—17	37.33	96	177	92	96
1926	77.5	40.1	58.9	108	—7	43.33	102	173	93	99
1927	75.5	41.5	60.1	103	—11	44.95	103	169	96	100
1928	77.4	41.0	58.8	106	—13	56.21	110	180	90	96
Period	...	...	59.0	108	—21	49.81	107	165	100	100

NORTH CAROLINA

MEAN ANNUAL TEMPERATURE AND PRECIPITATION


50°
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ALLEGHANY
ASHE
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
VANCE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
HERTFORD
HALIFAX
BERTIE
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
HYDE
BEAUFORT
PITT
WILSON
WAKE
JOHNSTON
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
JONES
ONSLOW
CARTERET
DUPLIN
SAMPSON
PENDER
NEW HANOVER
BRUNSWICK
COLUMBUS
BLADEN
ROBESON
SCOTLAND
HOKE
CUMBERLAND
HARNETT
LEE
CHATHAM
RANDOLPH
MOORE
MONTGOMERY
RICHMOND
ANSON
UNION
STANLY
CABARRUS
ROWAN
DAVIDSON
DAVIE
IREDELL
ALEXANDER
CATAWBA
LINCOLN
GASTON
MECKLENBURG
CLEVELAND
RUTHERFORD
POLK
HENDERSON
McDOWELL
BURKE
BUNCOMBE
MADISON
HAYWOOD
SWAIN
GRAHAM
CHEROKEE
CLAY
MACON
JACKSON
TRANSYLVANIA

NOTE:–

Full lines show mean annual precipitation.

Dashed lines show mean annual temperature.

(REPRODUCED FROM RAINFALL AND TEMPERATURE MAP PREPARED BY THE DEPARTMENT OF CONSERVATION AND DEVELOPMENT BASED ON U.S. WEATHER BUREAU RECORDS)

The formation of ice of any considerable thickness occurs only during exceptionally severe winters. It is seldom that there is an ice formation sufficiently thick for skating.

North Carolina lies completely out of the path of cyclonic storms that originate in the North and West. The state lies in the path of the subtropical storms that move up the coast from Florida, but their fury is largely spent by the time they reach this far north, the extreme eastern part of the state suffering worst from these storms. The damage to crops and property from all storms is very small indeed.

The average snowfall for the state is about five inches. During severe winters much larger amounts occur and may remain on the ground for a week or more, but during a normal season the ground will rarely remain white for more than two days at a time. There have been many winters during which large areas of the state have experienced little or no snowfall.

Forest Resources

The forests of North Carolina are and for many years have been one of the chief sources of revenue to the people of the state. Other states are noted for iron, coal, and oil. North Carolina has been and still is noted for her forests and forest possibilities.

The richness of the sylva of North Carolina, almost unequaled in the variety of hardwoods and conifers by that of any other region in temperate climates having an equal area, is unapproached by that of any other state or territory. The great variety of soils and climate has brought together trees from all parts of eastern America so that 24 kinds of oaks are to be found in the state, which is three more than occur in any state north of this one; and two more than are to be found in any state south of this one; of the nine kinds of hickories known to occur in the United States, eight are to be found in North Carolina; here are all six maples of the eastern United States, all the lindens, all six of the American magnolias, three of the birches, eight pines out of eleven, both species of hemlock and balsam fir, three elms out of five, six arborescent species of plum and cherry and three of pyrus (apple).[9]

And another authority says, "there are more different kinds of trees and plants to be found in North Carolina than in any other state in the Union."[10]

In the southeastern corner of the state are found the palmetto, American olive, mock orange, and live oak. In the mountains are found the black spruce, striped and spiked maples, mountain sumac, balsam fir, and aspen. Between these extremes lie the principal commercial forest trees of the state.

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[9] *North Carolina: The Land of Opportunity,* p. 38.

[10] H. M. Curran, Forester, N. C. and U. S. Depts. of Agriculture.

All together there are 153 kinds of woody plants which form a simple upright stem and attaining arborescent proportions growing naturally within the state; and of these over 70 are trees of the first size, and 57 are trees of great economic value. Fourteen of these are known to attain in this state a height of over 100 feet, three of them a height of over 140 feet; 16 of them reach in this state diameters of five feet or over; and five reach diameters of seven feet or over. The largest and finest specimens of individual development are to be found in the extreme eastern and western regions in places where the soils are not only deep and fertile, but where the greater part of the growing season it remains moist or at least mellow. Such conditions are furnished by the lower slopes and by many of the swamps of the Coastal region.[11]

The mountain forests are of two entirely different kinds, the spruce balsam and the hardwood. The spruce and balsam forests originally covered the higher slopes and peaks of our highest mountains down as low as 5,000 to 4,000 feet in elevation.

The forests of the mountains below the spruce forest consist of a mixture of many hardwood species together with a proportion of such conifers as hemlock and several species of pine. The principal hardwoods are yellow poplar, chestnut, red, white, and chestnut oak, hickory, and several others, some of them, such as cherry, walnut, and ash, of exceptional value as furniture and decorative woods. The abundance and percentage of the different species vary with the elevation, slope, soil, etc., and with the amount of cutting which has been done. Approximately 75 per cent of the mountain region is still in woods, and probably even a larger proportion than this should remain permanently in forest.

The forests of the Piedmont were originally hardwoods, chiefly oaks, mixed with short-leaf pine. Probably 50 per cent of the area is now in woods, one-half of which is the remains of the old hardwood forest with practically all the pine cut out; the other half is second growth pine seeded naturally after the land had been cultivated and subsequently abandoned. The forests of this region consist largely of the parts of farms not needed for agriculture.

The forests of the Coastal Plain region consist either of nearly pure stands of second growth pine seeded naturally after the first crop of long-leaf or loblolly pine has been removed or of various species of hardwoods, growing on undrained swamps or river bottoms. The pine forests are chiefly loblolly, known in the market as North Carolina pine, while the hardwoods are chiefly gums, oaks, and several other commercial species. There were originally considerable areas of white cedar or juniper swamp, but these have largely been cut over and as a result of fire have not reproduced themselves. Some 75 per cent of the Coastal Plain region is still in woods, the most easterly counties containing the larger percentage of forest.

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[11] *North Carolina: The Land of Opportunity*, pp. 39-40.

The following table[12] gives the most recent chief forest facts for the state:

TIMBER STAND AND PRODUCTION BY REGIONS, 1928

	Mountain	Piedmont	Western Coastal	Eastern Coastal	State
Total Area, Acres	6,464,640	10,647,680	6,833,280	7,248,000	31,193,600
Forest Area, Acres	4,437,391	6,359,055	4,450,130	5,954,245	21,200,821
Percentage of Forest Land	69	58	65	82	68
Total Stand, M.bd.ft.	5,178,000	2,402,000	2,680,000	3,130,000	13,570,000
Average Stand Per A. Forest Land, bd.ft.	801	225	392	432	435
Number Sawmills	735	627	411	367	2,140
Annual Lumber Production, M.bd.ft.	228,000	454,000	280,000	380,000	1,342,000
Stumpage Value of Timber Cut Annually	$1,905,000	$2,220,000	$1,163,000	$1,982,000	$7,270,000

Production and Consumption.[13] North Carolina now ranks tenth among the states in lumber production. The production in 1926 was approximately 971,000,000 board feet, or about 3 per cent of the lumber produced in the United States. Our rank is slightly better than it has been in recent years, but not as high as it was about 20 years ago, when we stood fourth as a lumber producing state.[14]

North Carolina consumed in 1926 about 676,000,000 board feet of lumber, or 69 per cent as much lumber as we produced. Probably it would profit the state more if all the lumber produced in the state could be processed at home. The states that export great quantities of logs and lumber in the rough do not profit much from the practice. In many respects consumption of lumber is a better index of the value of lumber to a state than is production.

North Carolina exports lumber to 26 states, principally to Pennsylvania, New York, New Jersey, Virginia, and Maryland. We ship to these five states about 450,000,000 board feet of lumber annually, or nearly one-half of all the lumber produced by the state. North Carolina receives lumber from 24 states, principally from South Carolina, Alabama, Mississippi, Tennessee, and Florida. Approximately 63 per cent of all lumber consumed in the state is produced at home. The remaining 37 per cent is imported.

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[12] Prepared under supervision of J. S. Holmes, State Forester, *Conservation and Industry,* Dec. 15, 1928.

[13] These facts are based on a report of the U. S. Dept. of Agriculture Forest Service covering year 1926.

[14] Ranked 4th in 1909; 7th in 1919. The cut in 1910 was 2,178,000,000 board feet.

Of the lumber produced in the state 79.8 per cent is softwood, and 20.2 per cent is hardwood. Of the lumber consumed in the state 67.8 per cent is softwood, and 32.2 per cent is hardwood. Thus we tend to export softwoods and import hardwoods.

Our forests are a chief source of income to the farmers and could be vastly more important. It is often claimed that North Carolina forests supply more firewood than the forests of any other state.

North Carolina farmers have a turnover of $32,000,000 a year from the 10,000,000 acres of forest land in this state.

Around $14,000,000 worth of forest products are used for home consumption each year, and in addition to the timbers used at home, around $18,000,000 worth of wood in the form of logs, cord-wood, pulp-wood, poles, and other products, are sold each year.

In the point of acreage, this is North Carolina's most important crop and possibly the most profitable crop when costs are considered. This crop needs neither cultivation nor fertilizer, and cutting the timber may be postponed indefinitely with an increase in its value while waiting.[15]

There are more than 20,000,000 acres of potential forest land in the state. A large part of the forest land is owned by lumber companies, but the major part is owned by farmers. More than 60 per cent of the average farm consists of woodland. It has been estimated that there are 5,000,000 acres of idle land which could and should be reclaimed for forests. This territory has been denuded of growth by forest fires following ordinary methods of logging and is either unsuited to, or not yet needed for, farming purposes. These 20,000,000 acres are estimated to be capable of producing at least 8,000,000,000 board feet of timber annually.[16] The annual cut is now approximately 1,000,000,000 board feet. Thus it is seen that our greatest natural resource is largely going to waste.

If farmers would think of their forest land as crop land from which an annual yield of timber could be cut, and would follow scientific methods of cultivation, protection, and cutting, they could derive more from their forests than they now derive from either of the two leading crops, at far less cost of production. However, before we are likely to cash in on this great asset we will need to (1) modify our tax laws which now make reforestation unprofitable, and (2) expend vastly larger sums on educational work, mainly on instructing farmers how properly to grow and harvest timber and how to prevent fires. It is essential to our prosperity that the highest possible productiveness be obtained from our forests.

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[15] H. M. Curran.

[16] A conservative estimate is 400 board feet growth per acre per year.

The maintenance of an unburned and thrifty forest cover on land not used for general farming is essential to the retention of soils and to the protection of our water power resources. If land is allowed to wash away, the land resources are depleted, the rivers and power site basins become filled with sediment, and the vast and indispensable water power resources of the state are imperiled.

Medicinal Plants. A discussion of forests does not cover the entire flora of the state. The flora of North Carolina are interesting for their variety as well as for their commercial value. The total number of plant species in the state is well over 6,000. One mountain, Mount Mitchell, is said to carry a greater variety of plant life than the continent of Europe. Among the flora of the state are many medicinal plants. Indeed no other state has such a variety of plants from which drugs are made. One compilation lists 128 drug plants that have been found in North Carolina,[17] together with the number of species of each, that contain medicinal properties. The species range from one to 78, with a total of 820 so far discovered in the state. Seventy-five per cent of all the drug plants collected in the United States are gathered within a radius of 100 miles around Asheville. The Asheville dealers handle 225 drug materials indigenous to that region. Recently many farmers have begun to cultivate drug plants, such as ginseng and golden seal, which yield from $2,000 to $5,000 per acre. Many farm families derive their chief income from drug plants and ornamental leaves.

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[17] By J. L. Burgess in *North Carolina: The Land of Opportunity,* pp. 49-51.

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CHAPTER II

PHYSICAL RESOURCES: WATER POWER AND MINERALS

North Carolina is famous for her water power resources and for the degree to which her streams have been harnessed to provide the state with power, light, and heat. At the present time (1929) the state ranks third among all the states in the amount of developed water power, being surpassed only by New York and California. As a result of large installations completed during the year 1928, two states that formerly stood ahead were overtaken. The state total of installed water power was 811,927 horse power at the close of the year 1928. One large plant now under construction will soon be completed, bringing the total installed capacity to 901,927 horse power. The 120 water power stations in the state now generate 6 per cent of the electric current generated by water in the United States.

The recent industrial development of the state has been due more to the development of our water power resources than to any other factor. Hydroelectric development has served both to stimulate the expansion of industries already established and to attract new industries to the state. Even before the development of electric power, our streams had been harnessed to supply direct power for the operation of many textile mills and other industries. The real industrial development, however, has been coincident with, or immediately preceded by, the harnessing of our streams for the development of electric power. Nothing is more certain than that the industrial development of North Carolina owes its greatest debt to the cheap power that has been derived from the rivers.

The vast amount of potential water power in North Carolina is due to two chief factors: the topography of the state, and the volume and distribution of rainfall. The Appalachian mountain system culminates in western North Carolina. The Piedmont Plateau, the region where power is chiefly developed, is the largest geographic division of the state. The topography of these two regions gives the physical setting for power sites. The second essential is volume and even flow of the streams. The western half of the state, like the eastern half, has an abundance of rainfall, which, fortunately, is fairly well distributed throughout the year. This is especially fortunate since the value of a site for power purposes is largely determined by the minimum power that can be counted upon. The minimum flow is far more important than the maximum flow. A fairly constant flow reduces the necessity for storage basins and for auxiliary steam plants. For instance, in a dry year like 1927, only 54.5 per cent of our power output was water-

AREA IN SQUARE MILES OF NORTH CAROLINA BY DRAINAGE BASINS[1]

AND TRIBUTARY AREA TO PRINCIPAL INTERSTATE STREAMS CROSSING THE NORTH CAROLINA LINE

BASIN	Basin Area in N. C.	Basin Area Above Upper N. C. Line	Basin Area Above Mouth or Lower N. C. Line	Tributary Area to River as it Enters N. C.	State of Origin	Tributary Area to River as it Leaves N. C.
Cape Fear	8500	0	8500 Mouth	0	N. C.	0
Neuse	4450	0	4450 Mouth	0	N. C.	0
Tar	3075	0	3075 Mouth	0	N. C.	0
Meherrin-Chowan[a]	1175	3700	4875 Mouth	1150 1185 1275	Va.	1175 1200
Roanoke	3375	6250	9625 Mouth	8150	Va.	0
Yadkin	9300	140	9440 S. C.	0	N. C.	7250
New[b]	760	0	760 Va.	800	N. C.	670 808
Catawba	3250	0	3250 S. C.	0	N. C.	2875
Broad	1450	0	1450 S. C.	0	N. C.	1475
Watauga	220	0	220 Tenn.	0	N. C.	150
French Broad	2825	0	2825 Tenn.	0	N. C.	2200
Little Tennessee	1875	46	1925 Tenn.	57	Ga.	1825
Hiwassee	650	370	1020 Tenn.	90	Ga.	990
Coastal Regions	11381	—	—	—	—	—
TOTAL	52,286					

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[1] Except for a few of the smaller areas measured on topographic maps, these determinations have been made on state maps of scale 1: 1,000,000. That type and scale of map does not permit determinations of absolute accuracy, but it is believed that for all general purposes the values are reasonably close enough to true values. [a] Crosses the N. C.-Va. line five times. [b] Crosses the N. C.-Va. line three times. Data supplied by Water Resources Division, N. C. Department of Conservation and Development, Chapel Hill.

generated, while in ordinary years around 88 per cent is water-generated. With the modern interlinking power systems, the necessity for auxiliary steam plants is reduced to a minimum.

Rivers and Drainage Basins. An important fact in connection with our water power resources is the large drainage area that our rivers have west of the fall line. The table on page 22 gives the essential facts about the river systems of North Carolina in so far as they have a bearing on power.

Power Companies. There are three large power companies operating in the state. They are, in order of hydro power developed, the Tallassee Power Company, the Duke Power Company, and the Carolina Power and Light Company. There are several other small companies. The following table shows the hydroelectric plants operated by the different power companies, the rivers on which the plants are located, and the power developed by each generating station.

HYDROELECTRIC POWER STATIONS IN NORTH CAROLINA, JANUARY 1, 1929

Company	River	Hydro H.P.
CAROLINA POWER AND LIGHT		
Lockville Plant	Deep	1,350
Buckhorn Falls	Cape Fear	3,900
Carbonton Plant	Deep	1,350
Blewett Falls	Yadkin	32,150
Norwood Plant	Yadkin	83,000
Marshall Plant	French Broad	4,000
Weaver Plant (under construction)	French Broad	3,350
Waterville Plant	Pigeon	90,000
Miscellaneous		2,550
	Total	221,650
DUKE POWER		
Mount Airy Plant	Ararat	1,000
Idols Plant	Yadkin	1,800
Mountain Island Plant	Catawba	82,400
Little River Plant	Upper Little River	625
Gunpowder Creek Plant	Gunpowder Creek	500
Rink Plant	Middle Little River	400
Oxford Shoals Plant	Catawba	56,000
Lookout Shoals Plant	Catawba	33,900
Rhodhiss Plant	Catawba	48,000
Bridgewater Plant	Catawba	35,600
Spencer Mt. Plant	South Fork Catawba	1,000
Tuxedo Plant	Green	8,000
Turner Plant	Green	8,400
Miscellaneous		1,400
	Total	279,025

HYDROELECTRIC POWER STATIONS IN NORTH CAROLINA—*Continued*[2]

Company	River	Hydro H.P.
TALLASSEE POWER		
Falls Plant	Yadkin	28,900
Narrows Plant	Yadkin	108,000
High Rock Plant	Yadkin	44,100
Cheoah Plant	Little Tennessee	96,000
Santeetlah Plant	Cheoah	66,000
	Total	343,000
VIRGINIA ELECTRIC POWER		
Roanoke Rapids Plant	Roanoke	7,800
	Total	7,800
MUNICIPAL		
Spring Hope	Tar	210
Elk Park	Elk Creek	250
Bryson City	Oconalufty	500
Franklin	Little Tennessee	1,500
Highlands	Cullasaja Creek	250
Andrews	Hiwassee	1,500
Flat River Plant	Flat	2,500
	Total	6,710
RURAL AND MISCELLANEOUS		
Lake Lure	Broad	5,200
All Other (Eight Plants)		2,480
	Total	7,680

	Hydro (H.P.)	Steam (H.P.)
Total Public Utility and Municipal	865,865	311,700
Add. Manufacturing Plants	36,062	248,988
Grand total in operation or under construction, Jan. 1, 1929	901,927	560,688

Growth of Electric Power. The state has experienced a large increase in electric energy generated by water during the last decade or so. Chief development has taken place since 1920. The table on page 28 shows the essential facts concerning the growth of electric power within recent years. Water power has gained rapidly over steam power. The steam plants are chiefly emergency plants, to be used during periods of prolonged drought.

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[2] Data supplied by the Water Resources Division.

Electric power is available in almost all of the counties of the state. The six thousand miles or more of transmission lines hook up nearly 90 per cent of the counties. These counties are served chiefly by the Duke Power Company and the Carolina Power and Light Company. The Tallassee Power Company is not engaged in public service. This wide distribution of power makes it possible for industry to be extensively scattered over the state. Few states are so completely covered with a network of transmission lines as North Carolina. The North Carolina network, in turn, is linked by interconnections with systems in adjacent states, a fact which allows the tide of power to flow in whatever direction the needs of the day may permit.

Undeveloped Water Power. There has been a great deal of speculation as to how much power can be developed from our streams. The estimates vary widely. The present generally accepted estimate is that North Carolina streams are capable of developing around two million horse power. In other words, the present installed horse power can be more than doubled. The state's outstanding authority[3] on our water resources has the following to say on this point:

> It is evident from the rate at which the production of electric energy in North Carolina has increased during the last decade, that new power sources must constantly be developed for many years in the future. In the past the abundant and cheap water power has been one of North Carolina's chief assets. How long may she continue to develop these resources? In the last 10 years the installed water power in North Carolina has increased from about 325,000 H. P. in 1918 to 611,000 H. P. at the end of 1927. Can a similar increase be met from undeveloped resources in the next 10 or 15 years?
>
> The Department of Conservation and Development estimates that undeveloped sites now controlled by public utility companies in this state total about 400,000 H. P. in addition to the 295,000 H. P. which they now have under construction. Thus the public utility companies alone are estimated to control some 695,000 H. P. of undeveloped water power in the state.
>
> In addition sites are known to the Department which have been the subject of engineering examination sufficient to indicate that some 505,000 H. P. of undeveloped water power is available from them. If this be added to the total of 695,000 H. P. estimated as controlled by the public utilities there is at least a total of 1,200,000 H. P. in undeveloped water power now available in North Carolina. In this estimate numerous undeveloped powers known to exist have not been included because they are at present not economical to develop. It is evident, therefore, that ample and attractive undeveloped water powers

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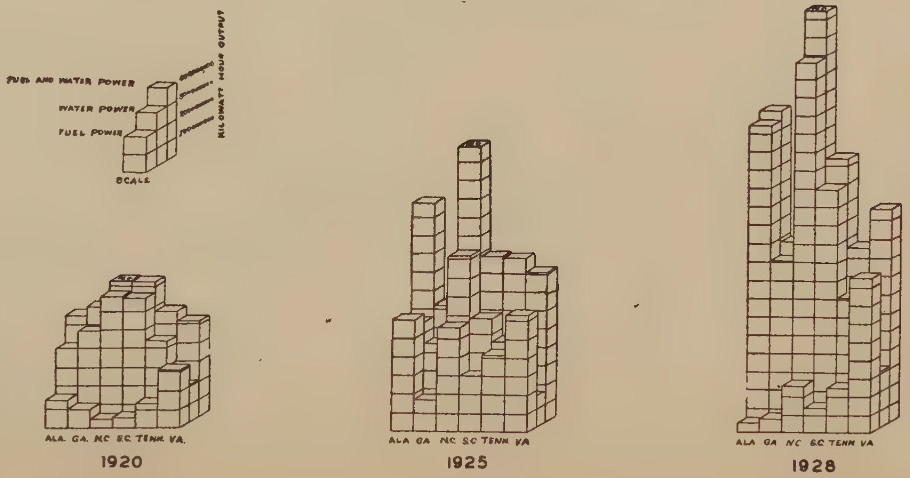
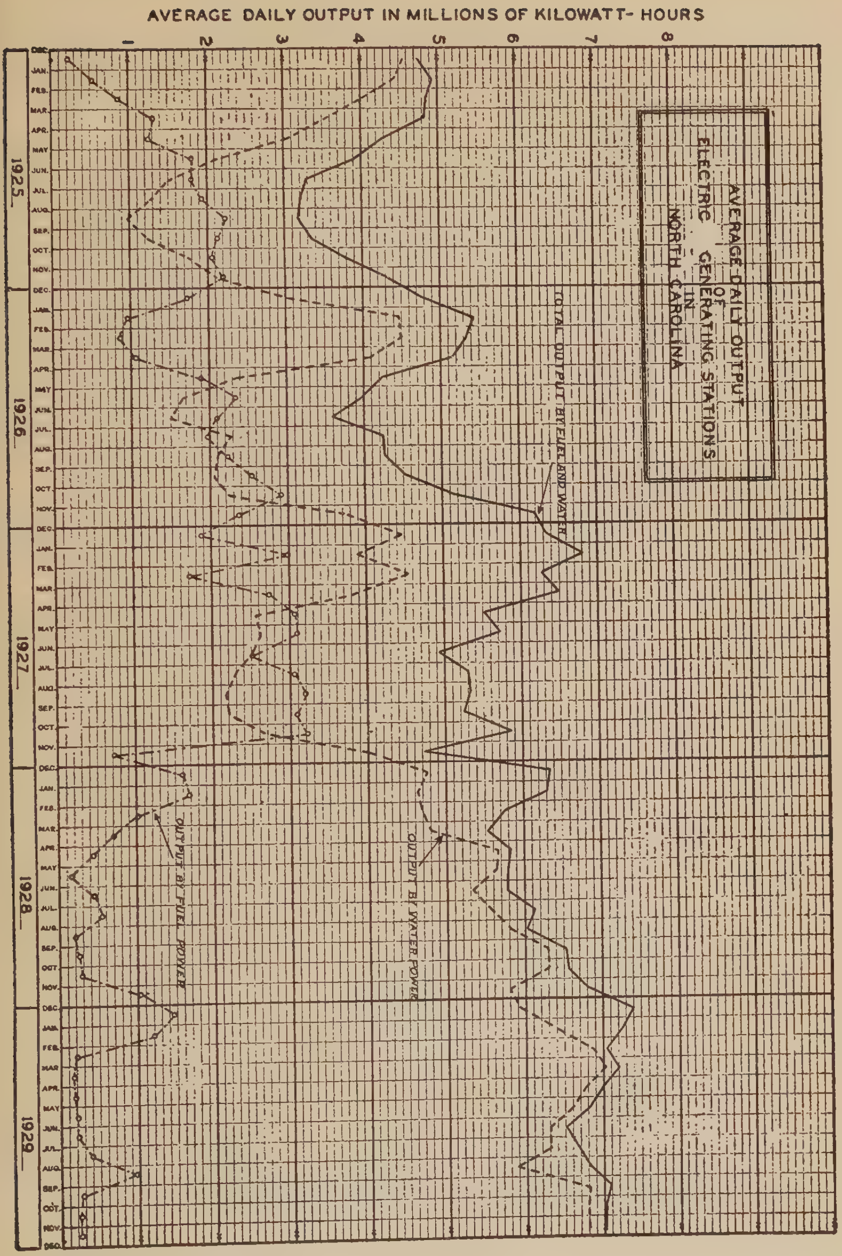
[3] Thorndike Saville, "The Water Power Situation in North Carolina." MS, 1928.

NORTH CAROLINA
COMPARED WITH
HER NEIGHBORING STATES
IN
KILOWATT HOUR OUTPUT
OF
ELECTRIC GENERATING STATIONS

DATA - N.C. DEPT. CONS. & DEV.




AVERAGE DAILY OUTPUT IN MILLIONS OF KILOWATT-HOURS
1
2
3
4
5
6
7
8
AVERAGE DAILY OUTPUT OF ELECTRIC GENERATING STATIONS IN NORTH CAROLINA
TOTAL OUTPUT BY FUEL AND WATER
OUTPUT BY WATER POWER
OUTPUT BY FUEL POWER
1925
1926
1927
1928
1929
DEC.
JAN.
FEB.
MAR.
APR.
MAY
JUN.
JUL.
AUG.
SEP.
OCT.
NOV.

exist in North Carolina to serve the normal needs for expansion for many years to come.

In connection with future water power developments in the state, it is interesting to note that the U. S. Geological Survey places North Carolina first of all the southern states in potential power, and second only to New York of states east of the Mississippi.

EXPANDING USE OF ELECTRIC POWER IN NORTH CAROLINA[4]

Year	Total Installed Hydro H.P.	Total Installed Fuel H.P.	Output in K.W. Hours of Generating Stations	Per Cent of Output by Water Power
1902	......	......	8,351,346	...
1912	......	......	70,552,737	...
1917	......	......	371,711,733	...
1920	328,600	391,500	732,627,478	93.0
1923	376,862	339,000	1,313,098,290	82.1
1924	496,212	450,888	1,416,815,240	87.8
1925	567,562	466,908	1,479,548,840	62.1*
1926	567,562	566,908	1,730,861,570	59.3*
1927	611,662	563,908	2,086,534,000	54.5*
1928	811,927	560,688	2,245,470,000	88.6

Rural Power. Great as are our water power resources and developments, they have meant little to the rural population. Almost the entire power output in the state is consumed by industry and by the urban population. The vast network of transmission lines passes through the farmers' fields and over their homes, but few are the farms that are offered service by our public utility companies. In discussing the rural power situation in North Carolina, Professor Saville says:

> A great agricultural state, North Carolina has been among the most backward of the southern states in promoting the use of power on the farm and in the construction of rural power lines. The Department of Conservation and Development has urged for some years the formation of a North Carolina committee on the relation of electricity to agriculture, such as exists in Alabama, Virginia, South Carolina, and in nearly all of the western agricultural states. Due to the outstanding developments in rural electrification in Cleveland County carried on under the stimulating direction of Governor Gardner, the Department hopes for an impetus to the activities in this direction during the coming year. A study carried on by the Department in 1926 showed that North Carolina ranked 40th among the states in number of farms with electric

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[4] Data supplied by Thorndike Saville, G. W. Smith, and C. E. Ray, Water Resources Division. Starred figures are the results of unusually long droughts.

service. The municipal plants are doing more than the larger of the utility companies to stimulate rural service, and even in the 26 counties making the best showing, only 1.6 per cent of the farms were equipped to use electricity. Manifestly the state owes a duty to its agricultural interest to study ways and means of providing electricity to the farmers. A state committee containing representatives of the power companies, state agencies involved, and farmers should begin at once detailed studies, such as are being carried on in other states to help improve the existing situation.[5]

North Carolina is exceedingly fortunate in having such vast water power resources and also in having such an excellent supply of water practically free from chemical impurities. Conserving and developing our valuable water resources is a matter that should engage the attention of every citizen in the state. The water supply of North Carolina is said to be equally as important as the water power. We should see to it that our streams are harnessed so as to develop maximum power and that our water supply is conserved and kept free from impurities. The great threats to our future water power and water supply are erosion resulting from deforestation and naked cultivation and the contamination of our streams in various ways. The constant deposit of silt gradually fills up the large power storage reservoirs and the basins back of the power dams. Reforestation, the protection of existing forest covers, a type of agriculture that will prevent erosion, and safeguarding the purity of the streams are all essential if the state is to have a permanent supply of water power and a permanent pure water supply for urban consumption and for those industries dependent upon chemically pure water.

MINERALS

North Carolina has the reputation of containing a little of nearly all the minerals but not much of any one. This is borne out by the fact that 289 species and sub-species of minerals have been identified within the state, in which respect the state stands first, yet the total value of its mineral products in its best year, 1927, amounted to only $12,500,000. North Carolina usually ranks around thirty-seventh in annual value of mineral output. This low rank is due partly to the fact that there has never been any extensive exploitation of our mineral resources, but largely to the actual lack of many deposits of great commercial value.

As a result of its peculiar geologic history North Carolina has almost every conceivable geologic formation and almost an infinite variety of mineral resources. The state furnishes an excellent laboratory for the geologist and until recently has been treated as such. However, during the last few years considerable development has taken place.

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[5] "The Water Power Situation in North Carolina."

Metals. Coal and iron are the bases of our modern industrial civilization. Relatively speaking, North Carolina is not rich in either. The largest coal deposit is known as the Deep River field and includes a region extending from the southern part of Chatham County ten or twelve miles into the northern part of Moore and Lee counties. In the Deep River coal field a tract of land containing not less than 15,000,000 tons of excellent steam and coke coal has been outlined by mines and drill holes, and it is estimated that in the remainder of the field at least 60,000,000 tons are available. The annual output of coal is around 60,000 tons.

The history of iron mining in North Carolina dates back to as early as 1729, when small shipments of iron were made to England. Mining of iron almost kept pace with the settlement of the western portion of the state. Some of the principal iron localities are the magnetite ores of Ashe and Avery counties, and the limonite ores of Gaston, McDowell, Madison, Clay, and Cherokee counties. The most noted iron mine in the state is the magnetic iron mine at Cranberry, Avery County, which has been in continuous operation for more than forty years. It is estimated that there are 6,000,000 tons of commercial ore in the Cherokee district lying close to the surface and as yet entirely undeveloped.

Copper ores have been found in considerable quantity in a number of localities, the principal ones being the Virginia or Blue Wing district, which extends across Person and Granville counties into Virginia, the Gold Hill district in Rowan County, the Ore Knob district of Ashe County, the Cullowhee district of Jackson County, and the Hazel Creek district of Swain County. The Ore Knob mine has been successfully worked for many years and contains one of the more important copper deposits of the state. Compared with the vast total of copper produced in the United States the North Carolina output is a mere drop in the bucket.

Tin is one of the few metals which are very rare in the United States, and one of the very few deposits which we have is in North Carolina. Cassiterite, which is the principal tin ore mineral, has been found in considerable quantity in Cleveland, Gaston, and Lincoln counties. The principal mining has been done at the Kings Mountain mine in Lincoln County.

Chief in interest, if not in commercial importance, among the minerals of North Carolina are gold and silver. They are usually found together. There are over 400 localities in the state where gold and silver have been mined. The area in which gold deposits are known to occur is a broad one and embraces from 8,000 to 10,000 square miles, or practically the entire Piedmont Plateau region.

Gold was discovered in North Carolina in 1799 when a seventeen-pound nugget was found on the Reed Plantation. This stimulated search elsewhere as the beginning of systematic mining. By 1825 gold mining was being vigorously carried on all along the eastern slopes of the mountains. The discovery of gold in California served to weaken the enthusiasm for gold mining in North Carolina, and with the outbreak of the Civil War all work ceased. While there are mines in at least twenty-nine counties, nearly all are idle.

The value of gold produced in North Carolina from 1799 to the present is around twenty-three million dollars. The present output is practically nothing. More money is spent in prospecting than is recovered in ore.

There are a number of manganese deposits within the state but very little has been mined. These deposits are to be found in Surry, Ashe, Cleveland, Transylvania, Catawba, Lincoln, and Gaston counties. Manganese is added to steel to make it harder and more elastic.

Iron pyrites, which is used in the manufacture of sulphuric acid, is found in many places in the state, but only in a few localities is it found in sufficient quantities to be commercially profitable. The principal mine is located about six miles from Dallas, Gaston County.

Chromite—an oxide of chromium and iron—may be found in at least four places in the state. There is a fine deposit in Yancey County, another is in Buncombe County, and two are in Jackson County. All of these are high grade ores.

Nonmetallics. Among the nonmetallic minerals found in the state none is more important than feldspar. The feldspars are the most important group of silicate minerals. The chief usefulness of the potash or potash-soda feldspars results from the fact that within certain limits of temperature they melt without becoming quite fluid, and on cooling form a strong colorless or very light colored glass. Because of this quality feldspar is extensively used in the manufacture of porcelain, serving as a flux to bind together the other constituents, clay and flint. It is also one of the ingredients in the glaze for chinaware and tiles. Since 1911 the state has grown from nothing in the production of feldspar to first place and now produces about one-half of all the feldspar mined in the United States. The deposits, which are ample enough to furnish all the feldspar needed by the growing trade, are located in the Spruce Pine district of Mitchell, Yancey, and Avery counties. Some of the strongest producers and users of feldspar in the United States are interested in this section. The industry has a promising future.

The only commercial deposits of pyrophyllite known in the United States are found in Moore and Chatham counties. This mineral, which is much like talc, has been known and mined for 70 years. It is a good substitute for talc. Since it is in the pure state an aluminum silicate it should prove an important material in the ceramic materials and arts.

A considerable amount of laboratory research and field investigation has been carried on to determine the quantity and value of the raw materials available for the establishment of the white ware industry within the state. As a result all the materials necessary have been located in quantity except ball clay. Large deposits of kaolin, feldspar, and potter's flint assure reserves for a large industry for years to come. The ball clay-like kaolins of the French Broad Valley give an assurance of a supply of this type material for some kinds of ware, especially the ivory tinted dinner ware, and any deficiency is easily taken care of by the nearby deposits of Tennessee. Research on pyrophyllite has also definitely proved its value as a valuable ingredient in wall and floor tile. The possibilities these materials open up to the state include dinner ware, floor and wall tile, electrical porcelain, chemical porcelain and sanitary ware.

What appears to be the largest known deposits of cyanite have been investigated and traced in a wide belt from Burnsville through Asheville almost to the Georgia line. This ore, a silicate of aluminum with a high fusion point, has recently become an important ingredient in high grade refractory bodies as well as electrical porcelains. At present all this material used in the United States is imported from India. Development of the North Carolina deposits only awaits the necessary capital to erect plants to separate the cyanite from the rock in which it is imbedded. This is simply a matter of time and an important industry is assured eventually.[6]

North Carolina ranks third in the number of establishments engaged primarily in the manufacture of common brick. Of the 803 establishments reporting to the U. S. Department of Commerce in 1927, 53 were in North Carolina. New York and Pennsylvania each had 76 establishments. North Carolina has an unlimited quantity and a great variety of clays suitable for the manufacture of brick, tiles, and pottery. There are only a few counties that do not contain clay suitable for the manufacture of common brick.

Along the valley of the French Broad River, in Henderson County, is an important deposit of soft fire clay suitable for buff or gray brick. The growing demand for this type of brick should make this area of great value.

In the Piedmont Plateau are three areas of shale in which tremendous developments have taken place, and several million dollars have been spent in new plants in the last six years. The biggest of these is the so-called "slate belt" of Archean Age, which crosses the state in a northeast-southwest direction near the eastern edge of the Piedmont Plateau and varies in width from 20 to 40 miles. In the southwestern part of this area are hundreds of square miles of shale suitable for face brick, hollow blocks, and building tile. A flourishing industry has sprung up around Norwood, Monroe, and Thomasville.

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[6] A. F. Greaves-Walker, Professor of Ceramic Engineering, N. C. State College.

In the Sanford or Deep River district, which is the geographic center of the state, Triassic shales outcrop over an area 75 miles long by 15 miles wide.

Another of the valuable silicates found in North Carolina is mica. It is widely distributed and is found in nearly all of the mountain counties. Mica was well known in prehistoric America, traces of its use being widespread. A great shaft near Mount Mitchell was discovered in 1869. This not merely solved the question as to the origin of the early supply, but gave the first impulse to the mining of mica in the United States. Mica lands in North Carolina became tremendously valuable. A large part of the world's supply now comes from New Hampshire and North Carolina. In New Hampshire improved methods of mining have been adopted, but in North Carolina, with apparently the richest fields in the United States, the mining is still unorganized, being done by farmers, with the simplest of tools, between crops. Mica is often used as a medium of exchange between farmers and storekeepers.

Monazite is one of the minerals found in the United States only in North Carolina. The only other large deposit is in Brazil. Zircon is another rare mineral, used in the manufacture of incandescent mantles. In Henderson County zircon in commercial quantity has been found, and two mines have been developed. Near Mars Hill, Madison County, zircon was found in well developed crystals associated with the large masses of monazite mentioned above. Many fine crystals of zircon have also been found in Iredell County. Barite has been found in several places within the state, but Madison County has for many years been the chief producer of this mineral. Among the more important commercial minerals should be mentioned talc and soapstone. Talc is characterized by its extreme softness, stability, purity, freedom from grit, and smooth, slippery touch. The principal talc mines are in Swain, Cherokee, and Madison counties.

Soapstone, or steatite, is the compact and more or less impure variety of talc which is usually quarried in large blocks and then cut up for use in the manufacture of tubs, table tops, heating blocks, foot warmers, griddles, or cut into bricks for use in chimneys and fireplaces. Soapstone is secured from Ashe and Alleghany counties. Graphite is found in some quantity in Alexander, Burke, Cleveland, Macon, McDowell, and Wilkes counties, but the main deposit is in Wake County. It is used in the manufacture of lubricants, stove blacking, paint, crucibles, and lead pencils. Quartz is mined in Gaston and in several of the more western counties. Many of the mines producing mica contain a large percentage of quartz. Its principal use is in the glass and pottery industry.

In building and ornamental stones, especially granites, gneisses, and marbles, North Carolina excels in variety and quality all of the states south of New England with the exception of Georgia. The Balfour pink granite of Rowan County, the Mount Airy granite of Surry County, and the Regal Blue marble of Cherokee County are firmly established in the national markets, and their names are taken as a guarantee of quality. Recent prospecting and developments in the marble area of Cherokee County and the building in Murphy of a modern courthouse of the Regal marble indicate greater developments and uses for it.

The most important development in the use of stone in the state in several years is the recent discovery that a large deposit of stone of volcanic origin near Hillsboro is of excellent quality and especially attractive for houses, churches, and college buildings. This stone consists of volcanic flows and fragmentals of acid composition which have been strongly metamorphosed. A wide range of beautiful colors as well as durable stone has resulted. Duke University has bought several hundred acres of this stone for use in constructing its new plant.

Gems. North Carolina has come to be a favorite field for the search for the beautiful crystals that are found in its mountains and the variety of rare and interesting minerals that occur in the streams associated with gold. Among these crystals and sands occur many minerals that have yielded true gems, and North Carolina has become famous for its gem production.

Gem mining in North Carolina had its origin in the finding of rolled crystals in the gold washings, but the first systematic mining for gems was undertaken by Mr. C. W. Jenks in 1871 when he opened the corundum mine on Corundum Hill, near Franklin, Macon County. From this mine came the largest crystal of corundum ever found, being 22 by 18 by 12 inches and weighing 312 pounds, and now deposited in the Amherst College collection. It is grayish blue in color. Other gems from this mine include a blue stone weighing over one carat, now in the U. S. National Museum at Washington, along with a wine-yellow sapphire of 3¼ carats, a violet-blue stone weighing a little over one carat, and three dark blue ones almost as large. Probably the finest emerald-green colored sapphire in the world came from this same locality and is now in the Morgan-Bement collection at New York.

There is no state or country that excels North Carolina in its variety of corundum gems, that is, rubies and sapphires. Their color range includes ruby-red, sapphire-blue, dark blue, various shades of green, violet and purple, rose, pink, yellow, gray, and neutral. The corundum gems are determined by their color, and there are at the present time nine varieties that are commonly recognized by the lapidaries. While the Corundum Hill region in Macon County has furnished the greatest variety of these gems, sapphires have also been found in Transylvania and Jackson counties and rubies in Transylvania.

Several members of the garnet group are found in North Carolina, some of the commoner kinds being used in making abrasives, while some of choicer quality yield beautiful gems.

The beryl, which is considered among the most valuable of precious stones, is found extensively in North Carolina. Under this head are aquamarines, blue to light green, the yellow or golden beryl, and the choicest of all, the emerald. Very few genuine emeralds have been found in the United States, and most of these few have come from Stony Point, Alexander County, North Carolina, where the first emerald mine in the country was developed. The first emerald was found in 1875. This was followed by several others during the next ten years, the largest weighing nearly nine ounces and now a part of the Morgan-Bement collection in New York. In 1894 a new locality of true emeralds was discovered on Big Crabtree Mountain, Mitchell County. The aquamarine, yellow, and golden beryls are found in many localities of North Carolina on both sides of the Blue Ridge.

The hiddenite, or lithia emerald, is a stone peculiar to North Carolina and hence of especial interest. It was discovered about 1879 near Stony Point and upon analysis was found to be a new specimen. The crystals are transparent and range in color from a light yellow to a deep yellow-emerald green. The finest lithia emerald yet found is in the Morgan-Bement collection. It is 2 and ⅖ by ½ by ⅓ inches. Quartz in its various crystalline forms—rock crystal, amethyst, and smoky quartz—is found at many points in North Carolina and in some cases is of superb quality.

Up to 1920 there had been ten authentic discoveries of diamonds in North Carolina. The first two were made in Burke County in 1843. In 1845 a diamond of one and one-third carats was found in gold washings in Rutherford County. The others were found in Lincoln, McDowell, Mecklenburg, and Franklin counties. The two largest, weighing two and three-eights and four and one-third carats respectively, came from McDowell.

Thus far, with the exception of rhodolite and beryl, the gem mines of North Carolina have not proved remunerative enough to warrant a continued development.

A real mineral asset, often overlooked, is an abundance of stone suitable for crushing and employed in highways, buildings, and other construction involving the use of cement, asphalt, and the like. Not many states are as favorably situated in this respect as is North Carolina.

MINERAL PRODUCTION FOR 1927

Mineral	Amount
Granite	$ 4,562,879
Brick and tile	3,834,494
Sand and gravel	871,416
Cement products	671,242
Feldspar	612,214
Limestone, marble, etc.	477,316
Coal	400,000
Kaolin	327,688
Mica	114,514
Iron	81,753
Pottery	25,192
Quartz	19,853
Gold	1,015
Silver	5
Miscellaneous*	793,373
Total	$12,792,954

* Includes copper, millstones, and talc.

The state has had a steady growth[7] in mineral production:

INCREASE IN VALUE OF MINERAL OUTPUT

Year	Value of Output	Year	Value of Output
1900	$1,604,078	1914	$ 3,692,461
1901	1,779,109	1915	3,584,725
1902	2,003,077	1916	4,746,674
1903	1,902,485	1917	5,411,452
1904	1,985,675	1918	5,192,047
1905	2,439,381	1919	6,404,679
1906	3,007,601	1920	8,117,916
1907	3,173,722	1921	5,676,301
1908	2,307,116	1922	7,483,305
1909	2,873,826	1923	11,050,257
1910	2,848,446	1924	10,163,435
1911	2,933,878	1925	10,699,422
1912	3,514,892	1926	11,274,224
1913	3,978,340	1927	12,569,433

The mining and quarrying industries are at the present time in a more prosperous and substantial condition than ever in the history of the state. Especially is this true of the nonmetallics, as brick and tile clays, and building stones.

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[7] Based on various reports of N. C. Geological and Economic Survey and its successor, the Dept. of Conservation and Development.

Compared with the great mining industries of other states, our many little mining projects fade into insignificance. With such a variety of minerals as we have, including all the staples and most of the rare and precious ones, thirteen million dollars is a small total annual production. This might be increased by more thorough exploitation of our mines, by the adoption of more modern methods in some instances, and especially by reducing the ores to a finished form. With a few exceptions, it is doubtful whether much stimulation to our mining industry is worth while. North Carolina is not a mineral state. It can never hope to rank high on that score. Our most valuable minerals are common clays and building stones. We have an unlimited quantity of brick, tile, and pottery clays, and a large supply of high grade building stones, especially granites. North Carolina has been aptly called "nature's sample case," and, with a few valuable exceptions, therein lies its glory.

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This section of the chapter is based very largely on data supplied by Professors Thorndike Saville and G. W. Smith, and by Mr. C. E. Ray of the Water Resources and Engineering Division of the N. C. Dept. of Conservation and Development, Chapel Hill, N. C. (This department will hereafter be referred to as the N. C. Dept. of C. and D.) Old references have been consulted but are not listed, as the data are more or less guesses.

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CHAPTER III

PHYSICAL RESOURCES: RESORTS, FISHING, AND HUNTING

RESORT RESOURCES

NORTH CAROLINA possesses excellent resort resources. Already the resort business has developed to the point where it is one of the major sources of income to the state.

On the east, the surf of the Atlantic marks the entire Carolina shore. Extending inland, the surface of the state may be likened to an inclined plane which gradually rises from the sea level until it reaches its highest point at the top of Mount Mitchell. Between these two extremes the topography varies greatly.

The generally conservative *Christian Science Monitor,* in describing the scenery of North Carolina, has the following to say:

> Rarely does one find such elemental beauty, no matter where the trail leads, as in North Carolina. Nature appears always in a joyous mood. Resting upon the heights of Mount Mitchell, the highest peak east of the Rocky Mountains, one is impressed with the consciousness of looking down upon the world; an experience felt as one of the most wonderful and inspiring possible to man, giving an exhilaration of thought and new revelation to the sense. As Thomas Dixon, distinguished North Carolina author, expresses it, "Looking down upon miles of lesser mountains, hills, valleys, farms, and houses that stretch away into the haze of the sky line, we feel our kinship with the divine."

Coastal Resort Resources. North Carolina's coast line, of approximately 300 miles, furnishes unlimited opportunities for recreation and sport. Her watering places are rendezvous for thousands of visitors during the summer season and extend from the South Carolina to the Virginia line, both on the ocean and the inland waters. There are also many cities not directly on the coast but which are near by and have facilities for water sport and recreation. The state owns a number of lakes in eastern North Carolina which are being developed for the benefit of the public. These include Lakes Waccamaw, Black, White, and Phelps. In addition to the many lakes in all sections of the state, developed by individuals and available for the public, the majority of the great power lakes have been opened to the public use.

Bathing, fishing, motor boating, and a number of other sports find an ideal setting along the broad expanses of the Carolina coast. Immediately inside the coast line, for a distance of more than half the frontage of the state on the Atlantic, are North Carolina's inland seas, comprising an area of around 3,600 square miles, which greatly add to its facilities for recreation, health, and sports. Splendid hunting and fishing grounds are located in and around these sounds.

Prominent among these resorts are Morehead City, Wrightsville Beach, Brunswick, Nag's Head, Ocracoke, Beaufort, Edenton, Manteo, Swan Quarter, and Elizabeth City. Morehead City and Wrightsville Beach, a suburb of Wilmington, are conceded to be more generally patronized than any other seaside resorts in the state.

The Sandhills. The thermal belt in the long-leaf pine section of North Carolina has some of the most popular winter resorts in the country. Among the best known are Pinehurst, Southern Pines, Pinebluff, Shelby, and Cleveland Springs.

Pinehurst is said to be the first inland winter resort in America. It is fortunate in its geographical position, set 650 feet above the sea level among the pines. Its natural advantages are supplemented by every facility for sport and personal comfort. It is 12 hours from Washington and 16 hours from New York. With few hours spent in travel, the Northerner comes into a climate perfect for outdoor sports but of a tempered mildness which makes a return to severe weather safe. The chief assets of this region are a dry atmosphere and warm sunshine. The chief sports are golf, riding, hunting, polo, archery, shooting, and tennis. Many tournaments are held each season.

The Sandhills area is one of the healthiest regions in America, having good elevation, being well drained, due to the hills and porous sand, and having an abundance of dry, warm sunshine. It is in the Sandhills that the state chose to locate its tuberculosis sanitorium, the site commanding one of the most attractive views in the state.

Western North Carolina. The popularity of western North Carolina as a year-round resort region has stimulated the establishment in and near Asheville and other cities and towns of resort hotels, golf clubs, and other facilities for entertaining visitors. Many millions of dollars have been invested in the construction of this resort equipment in the region, centering upon Asheville as a clearing point. Thousands of tourists are entertained annually in the great hotels of the city and in the many smaller mountain inns located within the 75-mile radius of mountain territory surrounding Asheville and known internationally as "The Land of the Sky."

Beautiful mountain scenery (there are 125 peaks, all wooded, above 5,000 feet in elevation, 43 of these being above 6,000 feet), a healthful climate which is conducive to outdoor life the year-round, a central location with regard to the greater population centers of the East, North, South, and Middle West, coupled with excellent highway and rail connections in all directions, golf courses, and other sports facilities, have made this section of the state one of the best known of the eastern playgrounds of America. Tourists, lured by the natural wonders with which the Asheville region is richly endowed, throng to western North Carolina during the late winter, spring, summer, and autumn months.

The establishment of the Great Smoky Mountain National Park, approximately 500,000 acres in area, at an initial outlay of $10,000,000, has fixed public attention on this region. The Great Smoky region contains the greatest area of virgin timber in eastern American mountains.

North Carolina has around 500,000 acres in National Forest lands, which include some of the finest scenery of the mountains. These areas are administered for the benefit of the public and, under certain restrictions of the United States Forest Service, are always open for the enjoyment of the public. They are, in effect, natural playgrounds for the whole country. The reservations include the Pisgah, Nantahala, and Unaka National Forests, all in the mountain section of the state. Appropriations have been made by Congress for a national forest in the pine lands of eastern North Carolina.

The Southern Y. M. C. A. and various denominational assembly grounds are located a short distance southwest of Black Mountain and near the great divide between the Mississippi and the Atlantic, nestled in the lap of a deep cove and surrounded by primeval forests. The panoramic view of adjacent mountain scenery cannot be surpassed. This area was incorporated under the laws of North Carolina to promote education along religious lines. It is held in trust by 21 trustees and pays no dividends. The season's registration for the various conferences is around 5,000. It is recognized as the largest center of Christian influence in the South. Each conference has its own assembly ground. The programs begin in June and last until September. Ridgecrest is the assembly grounds for the Southern Baptists, while the Southern Presbyterian assembly grounds are located at Montreat. Lake Junaluska, near Waynesville, is used by the Methodist Episcopal Church, South, and Lake Kanuga, near Hendersonville, by the Episcopal Church.

In and around Asheville are located many hospitals, especially those for sufferers from tuberculosis, including the great United States Veterans' Hospital at Oteen. Thousands of afflicted have completely regained their health in this area of salubrious climate.

Visioning the future demands for recreation, North Carolina has established the first units of what is destined in the future to be a comprehensive system of public playgrounds. Three state parks have already been set aside: Mt. Mitchell, 1200 acres; Fort Macon, 400 acres; and Rendezvous Mountain, 140 acres. Other areas are now being considered and will be added to the system as fast as they can be financed. State officials have set as a goal the acquisition of places of outstanding scenic and historic interest as sites for public parks, one or more within easy access of every section of the commonwealth.

For a good many years the resort resources of the state have been patronized largely by outsiders. Today the people of the state, in ever increasing numbers, are learning to play. There is an automobile for almost every family in the state, and our people can today, for the first time in our history, forget the grim decades after the Civil War which forced them to take life seriously and which developed a state of mind that associated play with wickedness. They can now afford to take time off occasionally and to avail themselves of the excellent recreational facilities offered by the state.

With hard surfaced highways that are the delight of the motorist penetrating the most remote and isolated mountain coves, traversing the bare sand reaches of the east, and curving over the hills of the Piedmont section, North Carolina offers its mountains, its seacoast, its Sandhill section with matchless climate and unsurpassed beauty as a year-round attraction to resort seekers.[1]

Fish and Oyster Resources

Fishing and hunting were the earliest means by which man gained his living. These two age-long pursuits are still prominent in North Carolina and promise to become much more prominent. Fishing is the state's third most important extractive industry, being surpassed only by forestry and mining. "Latest available figures (1925) show that approximately 15,000 persons are engaged in fishing activities incident to the production and marketing of the sea foods in North Carolina; and a population of around 50,000 is estimated to be dependent upon the industry for a livelihood."[2] The annual value of all sea food products in North Carolina averages about $3,000,000. The possibilities are far in excess of this amount. In fact, the fishing possibilities of North Carolina are recognized as among the greatest possessed by any state.

The coast of North Carolina, following the outer shores, is only about 300 miles long, but if the sounds, estuaries, and other indentations are considered, a coast-line nearly 1,500 miles in length is disclosed, along a greater part of the extent of which the prosecution of commercial fishing is made possible by the configuration of the shores and the adjoining bottom, the absence of high or rocky shores, and the preponderance of low, sandy stretches and shallow water areas, permitting the employment of pound nets, seines, and gill nets under the most favorable circumstances.

The characteristic physical features of the coastal regions of North Carolina are the low, narrow, sandy islands and peninsulas which skirt nearly the whole ocean front of the state, between which and the mainland are numerous sounds, some of large size, which are the principal fishing grounds, while the mainland is very irregular in outline and is intersected by the estuaries of a number of large and small streams.

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[1] *Raleigh Times,* Jan. 11, 1929.

[2] *Fishing in North Carolina.* Bulletin.

The principal fishing grounds are the sounds and lower courses of the streams emptying into them. Fishing in the upper courses of the rivers is usually of a non-commercial nature, and is unimportant.[3]

The largest of these sounds are Currituck, Albemarle, Roanoke, Croatan, Pamlico, Core, Bogue, and a number of others. Large rivers such as Chowan, Roanoke, Pamlico, Alligator, Neuse, and Cape Fear are well known as spawning grounds for white shad. The Chowan is said to be the greatest spawning ground for shad in this country.

Currituck, the most northern of the North Carolina sounds, is a fresh-water body; is forty miles in length; averages in width three or four miles; and has an area of approximately 130 square miles. The sound has no direct outlet to the sea, its only communication directly to the Atlantic having been closed by natural forces since early last century. Black bass, perch, and striped bass are found in abundance in the sound.

Immediately south of Currituck Sound is Albemarle, credited with being the largest coastal body of fresh water in the world, extending from east to west a distance of 60 miles with an average width of 6 to 7 miles, widening at some points to 15 and covering an area of approximately 450 square miles. Eight rivers, among which are the Roanoke and Chowan, emptying into the sound, provide favorable spawning grounds for white shad and striped (rock) bass, probably the best along the Atlantic coast.

Roanoke and Croatan sounds, parallel to the coast and separated by historic Roanoke Island, form a natural passage between the larger Albemarle and Pamlico sounds. Both of the smaller sounds are about 8 miles in length, Roanoke being between 1 and 2 miles in width and Croatan 2 to 4 miles.

Croatan, being the natural passage between Pamlico and Albemarle, is considered one of the best fishing grounds in the state. It is said that its bottom is more valuable than the same area of some of the best farming lands.

Largest of the sounds along the North Carolina coast is Pamlico, 75 miles long, and 10 to 30 miles wide. It has an area of 1,860 square miles and ranges in depth up to 20 feet. This is the largest sound on the Atlantic coast except Long Island Sound. Migratory fish use the sound as a passage to their spawning grounds, especially the white shad and striped bass.

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[3] *North Carolina: The Land of Opportunity,* p. 92.

The sound also affords large quantities of salt water species such as mullet, spot, croaker, drum, bluefish, sheephead, and hogfish. Much of the bottom of this sound is covered with the finest quality of oysters.

Core and Bogue sounds, communicating with Pamlico Sound on the north, and extending first in a southwesterly and then in a westerly direction, form a long and narrow body of water about 50 miles in length, and from 1 to 6 miles in width. Their area is about 165 square miles. These communicate with the ocean through Beaufort, Bogue, and Bear inlets. The water is very shallow, varying from 1 to 10 feet, and averaging not more than 4 or 5. The people living on the shore of these sounds are very generally dependent on the water for a livelihood, and the fisheries carried on are very extensive. The principal species taken are mullet, squeteague, bluefish, spots, hogfish, Spanish mackerel, and whiting.

South of Bogue Sound the coast is fringed with six small, shallow sounds, known as Browns, Stump, Topsail, Middle, Masonboro, and Myrtle. These have but little bearing on the fisheries at present and are chiefly important because of the possibilities they have for oyster production and cultivation. White Oak and New rivers, the only streams of importance between Beaufort entrance and the Cape Fear River, also have natural oyster beds. New River contains some of the finest oyster ground in the world.

From the headwaters of the Alleghany watershed to the coastal waters of the Atlantic, each physical characteristic of the waters has its indigenous fish, many species of which were first known from North Carolina waters. The headwaters in the mountain; the broad, slow-moving river mouths; the sounds and the outer shores each have species known to commerce and sport.[4]

Because of her almost central geographical location among the coastal states and her variety of climatic conditions, North Carolina enjoys a number of prominent features relating to her fish fauna, which, as listed by Hugh M. Smith,[5] include the following:

1. Abundance of some anadromous fishes, whose numbers are scarcely surpassed in any other waters, the chief of these being shad, the alewives and the striped bass.
2. Variety and abundance of suckers, minnows, and sunfish in the fresh waters generally and of darters in the headwaters of the streams on each side of the Alleghanies.
3. Occurrence in the sounds and the outer shores of immense

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[4] *Fishing in North Carolina.* Bulletin.

[5] *Fishes of North Carolina.*

schools of mullet, squeteague, menhaden, bluefish, croaker, spot, pigfish, pinfish, and other food fishes.

4. Extension to the North Carolina coast of many species which are characteristic of the West Indies or Florida.

5. A few species of the Atlantic coast reach their southern limit in North Carolina (such as the cod and tautog) or do not occur in noteworthy numbers farther south (such as the white perch and striped bass).

The latest available classification of fishes of North Carolina waters gives 345 species, not including several which have been introduced and have become more or less frequent. There are 99 families of native fishes and 215 genera, an average of 3.5 species a family and 1.6 species per genus.

In number, the salt or brackish water species lead with 209; freshwater species come next with 125; and the last group which inhabits both types of water at times, known as anadromous or catadromous, is third with 11.

VALUE OF FOOD FISH IN NORTH CAROLINA, 1927[6]

TYPE	VALUE	PER CENT
Shad	$ 551,836.78	37
Trout	293,457.91	19
Herring	116,253.99	8
Croakers	99,444.51	5
Mullets	91,248.11	6
Rock	76,243.76	5
Bluefish	71,301.38	5
Mackerel	42,574.34	3
All Others	173,235.58	12
Total	$1,515,596.36	100

The annual catch of food fish is around 25,000,000 pounds. In addition to food fish, there is an enormous catch of non-food fish, chiefly menhaden, or fatback, used in manufacturing processes. The annual production of oil from these fish is about 1,000,000 gallons. The annual production of menhaden is around 180,000,000 pounds. These fish are caught off the coast.

North Carolina has marked natural advantages for the development of a large oyster industry. Pamlico Sound produces an oyster which is pronounced equal in flavor to any and which is a most desirable food. The annual yield of oysters averages around 500,000 bushels. The oyster production in North Carolina could easily be 3,000,000 bushels a year.[7] The state is now endeavoring to conserve and develop its oyster resources, and probably the yield will increase a great deal.

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[6] *Conservation and Industry,* Jan. 15, 1928.

The clam industry is a small one, but there is an excellent opportunity to develop it into considerable size. The greater portion of the clams are obtained from Wrightsville, Myrtle Grove, Topsail, and Bogue sounds, and from Newport River.

The escallop industry is confined to Carteret County, the catch being from Bogue and Core sounds. For the last 10 years the escallop industry has been worth approximately $200,000 a year.

Nearly all the shrimp are caught off the coast of Brunswick County, a great deal of which is canned at Southport. The total catch of shrimp in 1925 was 660,708 pounds, valued at $66,070, as compared with a catch of 638,400 pounds, valued at $51,072 in 1924.

A large quantity of crabs are caught during the summer months. The crab grows in profusion in the sounds.

The fishing resources of the state are not confined to the eastern part. The state is well provided with streams, both large and small, and most of these streams are fairly well stocked with a great variety of fish. Many thousands of people are confirmed anglers, while many more are itinerant fishermen. Trout and small-mouth bass fishing is especially popular in western North Carolina. The coastal waters contain a great variety of game fish.

Due to the lack of any conservation and development policy of note on the part of the state until 1923, the fish and oyster resources of the state had become depleted or were far below the level of potential production. The 1923 legislature provided a half-million dollar fund for fish and oyster conservation work, chiefly for the purpose of building fish hatcheries. From these hatcheries were distributed more than 10,000,000 fish during 1928, the number having increased from less than 2,000,000 for the previous year. Twenty-five private fish hatcheries have been established, which are supplementing the rapidly expanding work of the state. These are exclusively for the purpose of stocking the inland waters of the state.

The 1925 legislature established the Department of Conservation and Development to supersede the Geologic and Economic Survey.[8] One of the main functions of the new establishment is to conserve and develop the fish, oyster, and game resources of the state. Uniform fish and game laws have been passed (1927) for the entire state, a large amount of constructive work is being prosecuted, and the outlook is bright for the future.

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[7] According to Dr. H. F. Moore, formerly Assistant Commissioner, U. S. Bureau of Fisheries.

[8] The old Geologic and Economic Survey did an enormous amount of excellent research but did not have sufficient funds to carry on much conservation work.

QUANTITY AND VALUE OF FISH PRODUCED IN N. C., 1880-1928[9]

YEAR	POUNDS OF FISH	VALUE
1880	32,249,000	$ 845,695
1890	51,799,000	1,027,669
1897	64,234,000	1,316,017
1908	101,422,000	1,716,000
1918	210,502,000	2,978,708
1928	225,000,000	3,000,000

HUNTING RESOURCES

That North Carolina has excellent game resources is shown by the fact that nearly 140,000 persons took out hunting licenses during the 1927-28 season, the first year that hunting licenses were required under the new state-wide game law passed by the 1927 legislature. These persons contributed to the state more than $200,000 for the privilege of hunting for the season. The value of game killed by the 50,000 licensed hunters who made reports to the state was approximately $1,000,000. The total value of game killed was probably around $2,000,000.

> North Carolina occupies a strategic position along the flight lanes of the great hordes of our migratory wild fowl and other species of migratory birds, and within its borders are located some of the best known wintering grounds of migratory birds in the country. . . . The state also has abundant resources in upland game and is well adapted to the production and conservation of all native species. This is particularly true of quail, rabbits, and doves. . . . Under the state-wide correlation of protective agencies, the adoption of uniform policies in regard to game conservation throughout the state, and the establishment of a reasonable number of refuges and protected areas, including restocking where necessary, all of which is made possible for the first time under the new conservation act, the revenue to be derived from it, and the organization for its administration, I look for North Carolina to maintain its rightful position among the leading game states of the Union.[10]

The leading types of game are quail, wild turkeys, deer, migratory water fowl, especially duck and geese, a wide range of fur-bearing animals, as the muskrat, raccoon, squirrel, opossum, beaver, mink, fox, and the omnipresent cottontail or wild rabbit. Quail are found throughout the state—in most places abundantly—the middle, Sandhill, and eastern sections affording the finest shooting of what many consider our best and most typical American game bird. Several extensive reservations are located in the state. The ruffed grouse—the partridge of the North and the pheasant of the South—is confined to our Mountain counties but it is not uncommon there in suitable situations at the higher elevations.

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[9] *Commerce and Industry,* vol. I, no. 3, for 1880 to 1918. Data for 1928 given above are approximate.

[10] P. G. Redington, Chief U. S. Biologic Survey.

There are some deer in the lowlands of the east and in the mountain section, and better protection would soon cause a noticeable increase in their numbers. Our white-tailed deer is naturally a ubiquitous animal, thriving equally well in a temperate mountain country, a cold climate, and a semitropical swamp.

The wild turkey, one of the great game birds of the world, is still comparatively plentiful in the less settled parts of the state. The habitat of this magnificent bird corresponds in a degree with that of the deer, but it is much wider in extent. The range of the black bear also corresponds in the main with that of the deer, but it is more restricted, except in the mountain region. Bears are much more shy than deer and always a great deal harder to secure. They will not live close to civilization.

The squirrel, raccoon, opossum, and rabbit are found everywhere, their abundance depending on local conditions.

North Carolina is noted for her wild fowl. From Harbor Island Bar, northeast and north to above Gull Island, some 60 miles of the southeastern and eastern borders of Pamlico Sound, winter more brant than in any similar area in the United States. And the same may be said of the Canada goose over the sounds and estuaries of the region lying between the Virginia line and the western border of Onslow County.

Most of the canvasback taken in the state are secured on Currituck Sound; redheads from Currituck, Pamlico, and Core sounds; and broadbill from the above and as far down the coast as our sounds extend. Mallard, black duck, pintail, and the other fresh-water ducks are found on Currituck and the smaller sounds and the river estuaries and creeks all down the coast line.

Whistling swan have always wintered in numbers on Currituck, and since the United States regulations have prohibited the shooting of this splendid bird, the number of swan wintering there has greatly increased, and their regular habitat has been extended farther to the south.

The comparatively few snow geese that occur on the Atlantic side of the United States have their center of abundance on Currituck Sound.

A census of game killed during the season of 1927-28 showed that 4,529,590 pieces fell before the hunter's guns, as follows: 1,555,270 rabbits, 1,263,360 squirrels, 4,510 deer, 28,260 raccoons, 324,210 opossums, 16,810 minks and skunks, 720 wild-cats, 34,140 muskrats, 981,980 quail, 6,110 turkeys, 400 grouse, 2,820 pheasants, 17,540 snipe, 1,220 rails and coots, 12,740 woodcocks, 170,070 doves, 5,280 geese, and 103,690 ducks. [A large number of fox are caught each year, also some bears.][11]

The state-wide game law passed by the 1927 legislature will do much to protect our wild game and increase the volume. The State Department of Conservation and Development, which administers the law, is doing excellent work in conserving and developing the state's game resources. As a result of the new policy North Carolina's game resources will greatly increase and will serve not only as a source of pleasure to hunters, but as an important source of revenue.

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The Library of the Rural Social-Economics Dept. of the University contains files of clippings and special material on each of these resources.

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[11] *Raleigh Times,* Jan. 11, 1929.

CHAPTER IV

POPULATION COMPOSITION AND CHARACTERISTICS

In order better to understand North Carolina at the present time, it is necessary briefly to outline the origin and growth of our population and to set forth a few of the outstanding conditioning factors, along with a few characteristics. It does not seem feasible to attempt to review the history of the state, since any worthwhile account necessarily would require a great deal of space. Only that part of our history which will shed light on our present economic and social conditions will be reviewed. These conditions are not the result of chance, but rather the result of three definite factors: (1) racial strains, (2) a substantial middle class, and (3) physical characteristics of our state, especially the shore line.

Conditioning Factors

Racial Strains. The various racial elements that composed the original population have been set forth by Professor R. D. W. Connor in his *Race Elements in the White Population of North Carolina.*[1]

> They are first, the commercially-minded, law-abiding, self-reliant Anglo-Saxon, or English; second, the Celtic Scotch-Highlander, picturesque, proud and sensitive; third, the democratic, liberty-loving, religiously-minded Scotch-Irishman; and finally, the German, shrewd, economical, conservative, a lover of learning and of religion. By these people, and their descendants, the history of North Carolina has been made and her destiny has been shaped; and the typical North Carolinian of the twentieth century is neither Saxon, nor Celt, nor Teuton, but is the off-spring of the three.
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> The history of North Carolina begins with the coming of the English. Driven on by the Anglo-Saxon's keen, insatiable hunger for land, Englishmen about the middle of the seventeenth century crossed the Virginia boundary line, sought out the rich bottom lands along the shores of Albemarle Sound, and there laid the foundations of the state.
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> Historians do not agree in their delineation of the character of these founders of our state and civilization. There are those, of whom perhaps George Davis, the historian of the Cape Fear, was the most eminent, who would have us believe that the settlers of the colony "were no needy adventurers, driven by necessity—no unlettered boors, ill at ease in the haunts of civilization, and seeking their proper sphere

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[1] The author is indebted to Professor Connor for the material in the passages that follow.

amidst the barbarism of the savages," but that "they were gentlemen of birth and education, bred in the refinements of polished society, and bringing with them ample fortunes, gentle manners, and cultivated minds." On the other hand, there are William Byrd, John Fiske, Henry Cabot Lodge, and others of their school who could see in Colonial North Carolina nothing more than "a kind of back woods for Virginia," "an Alsatia for insolvent debtors," "mean white trash," and outlaws from the northern colony. John Fiske divided the early settlers of North Carolina into two classes: first, the thriftless, improvident white servant class who could not maintain a respectable existence for themselves in Virginia; second, the outlaws who fled (from Virginia) into North Carolina to escape the hangman. Neither picture is true, for if Davis insists that the shield is all gold, none the less does Fiske insist that it was all of the baser metal. The truth lies between. Undoubtedly there were enough well-born educated leaders among the population to give a cultured atmosphere to the best society in the colony; and undoubtedly there were enough escaped outlaws to keep the officers of the criminal law ever vigilant. But both together constituted no larger percentage of the population of North Carolina than of the other colonies and in none of them were they more than a very small minority. Between the two extremes, constituting then as now the bone and sinew of the population, were those sturdy, enterprising, law-abiding and deeply moral middle-class Englishmen who have always from Crecy and Agincourt to Yorktown and Gettysburg formed the strength and character of the English-speaking nations.

In all parts of the world wherever the Englishman has gone, whether in India, in South Africa, in Australia, or in America, he has carried with him the industrial, political and intellectual customs of his native island. The English ideal of home life, the English industrial system, the English principles of politics and government, the English language and literature sooner or later become the dominant forces wheresoever the Englishman sets up his home. North Carolina has been no exception to this rule. Although the first English settlers were speedily followed by the Scotch and the Germans in large numbers, who spread over many of the choicest portions of the country, yet the customs, the government, and the language of North Carolina from the first have been those of the English settlers on the Albemarle.

A study of this settler reveals to us a prosy, commonplace individual, possessed of an immeasurable amount of hard, common sense, whose chapter in our history has been more instructive than romantic. In him we find all the qualities essential for the conquest of the wilderness and the founding of a commonwealth. He had courage, determination, and he possessed, too, the instincts of the home-maker and an intense devotion to liberty, law, and justice according to English conceptions and English standards. To him we owe it that these standards were planted in North Carolina, at least to some extent. His struggles to preserve in the wildwoods of Carolina the great principles of liberty which his forefathers had wrung from the mailed hand of tyrant kings in the wild woods of Britain, no doubt led him into frequent excesses and violence. But we can pardon some of this because it was done in the spirit of liberty.

Probably the most important contributions made to our history and civilization by the English settlers in North Carolina were political. They demanded that the fundamental principles of the British Constitution in its full vigor should follow them into their new home, and they insisted that their charters should guarantee to them all liberties, franchises, and privileges enjoyed by their fellow-subjects in England. Time after time they rose up in rebellion against the colonial governors in order to preserve these rights.

But if we find the English settler on the Albemarle prosaic and unromantic, we find his Scotch neighbor on the upper Cape Fear picturesque and interesting enough. The genius of Sir Walter Scott has thrown a halo of romance about the Scotch Highlanders as they appear on their native heath, which they did not lose even amid the forests of America. They were a strong and active race, large in stature, well-developed, robust in health. Their wild life among their native highlands imposed upon them occupations that developed strength and courage and activity of both mind and body. Following the chase over pathless mountains and waging constant warfare among themselves and with their neighbors of the lowlands had trained them to a keenness of sight and swiftness of limbs that rivaled those characteristics in the American Indian. They developed as well firmness of decision, fertility in resources, ardor in friendship, love of country, and a generous enthusiasm. Brought up to the use of arms in the midst of perpetual violence, it is little wonder that their descendants rank high in homicides and other crimes in North Carolina at the present day.

The Revolution wrought great changes in their lives. A new nation was born, and the Highlanders were forced to adapt themselves to the new order, but to any student of social and economic conditions in the state it is easy to see that some of their characteristics have persisted down to the present time. This may explain why the people of North Carolina do not have more of the comforts and conveniences of life, and why some of them as yet do not seem to want these things.

To the west of the Highlanders we find another element of Scotch population, which differed in many important particulars from its neighbors of the upper Cape Fear and which bore a closer resemblance to its English cousins of the east. These people were the Scotch-Irish, who began to find their way to the New World about the beginning of the second quarter of the eighteenth century. Landing for the most part in Philadelphia, they followed the course marked out by the foothills of the Alleghany Mountains, until they had dispersed themselves in small settlements throughout the Piedmont regions of Virginia and North Carolina. Another stream of these settlers, landing at Charleston, moved up the banks of the Yadkin, the Catawba, and the Broad rivers until they met the stream from Pennsylvania. Before the outbreak of the Revolution the Scotch-Irish had scattered all through the hills and valleys and along the river banks of central North Carolina, adding to our population an element that has written many of the best chapters of our history. Sensitive about his rights, the Scotch-Irishman was ever ready to defend them with a calm, cool, unflinching courage. "Kings and governors were kings and governors to him only so long as they obeyed the law and were faithful to the rights of the people, and the due execution of those laws. He was free not from the law but by law." With this love of liberty he joined in close union a stern religious faith and an intense love of learning. The "church and the schoolhouse followed him as the shadows follow the sun." Among no other element of our population have the minister and the teacher exercised so general an influence or held so conspicuous a place in leadership. Of the Scotch-Irishman, therefore, we may say that he brought with him a love of liberty as intense as that of the Englishman, but carrying with it less reverence for constitutional forms and legal precedents. Less ardent in his nature than the Highlanders, he displayed in the early crisis of our history a sounder political judgment and a calmer temperament; he had a religious faith as deep but not so emotional; though not so picturesque and interesting, he has been a more conservative force in our history and has added a greater stability to the character of our people.

From Pennsylvania, following the same route as the Scotch-Irish, came a fourth element in our population who became near neighbors of the Scotch. These were the industrious and thrifty Germans who settled along the waters of the Yadkin and Catawba rivers and spread out over the Piedmont Plateau. A few came as adventurers to follow careers as hunters and trappers. Others came in search of cheap land. Still others came for religious reasons, cheerfully braving the dangers of the sea and the hardships of the wilderness in search of religious freedom. Side by side with their cabins went up their schoolhouses and churches. Like the Highlanders, they brought the language and customs of the Old World to their new homes. But these were given up for the new ways of the New World.

The Germans were thrifty, industrious, and intelligent. They practised an unbounded hospitality in their homes and were open-hearted, simple, conscientious, and independent. Though always law-abiding and patriotic, they took but little active interest in politics. The isolation of their situation on the extreme western frontier, their inability to speak and to understand the English language, their lack of political experience caused them to take little interest in the affairs of the colony. This remained true for a number of generations, and it is due probably to these early habits that they do not as yet take a proper part in governmental affairs. They were willing to leave the management of public business to the English and the Scotch, to whom politics came as second nature, while they devoted their energies to their religious, industrial, and social affairs. In another very important respect the Germans differed from their English neighbors. The English in North Carolina, following a strong bent toward individualism, settled on large and widely scattered plantations and developed an agricultural civilization based upon Negro slave labor; the Germans, on the other hand, manifested a decided tendency toward communism, which led them to settle in compact communities, with the church and school as the center, and which resulted in the development of an industrial civilization based on free white labor. There were several such communities among the German settlements in North Carolina, the most typical one probably being Wachovia, which later became Winston-Salem.

Their farms were smaller than those of the English, and much better cultivated, their cattle fatter and sleeker. The superiority of the German in these respects over the English planter was due not only to his greater industry and thrift, but also to the difference in his system of labor. It was the difference between the skilled, careful, and energetic labor of the free white man and the inefficient, wasteful, compulsory labor of the enslaved Negro working under the impulse of the lash. In the German household everybody worked. They not only raised their own food, but also made their own clothes.

While the Germans, as has just been pointed out, had very little influence in matters of government, it would seem from the very nature of their mode of life that they would have a large influence in education. In the development of their religious and social life the German settlers had a very decided advantage over the other early settlers in North Carolina. Their community settlements enabled them to organize churches and schools much more readily than those who settled on widely scattered plantations. At first the church and the school were one and the same institution, and the minister was the teacher. Pennsylvania and Germany supplied these teachers, and many of them were men of ability and profound scholarship. From their race have come a number of the leading educators of the state—state superintendents, presidents of some of the colleges and state educational institutions, with a large number of county superintendents and teachers.

Estimates of the population of North Carolina at different periods prior to the Census of 1790 vary widely; there are, however, sufficient data to justify us in estimating the total population in 1760 at 130,000. The same data lead to the conclusion that at that time the English formed a little more than a third, the Scotch about one-third, the Germans less than one-ninth, and the Negro slaves about one-fourth of the total. Rejecting all other elements of European origin such as French, Swiss, and Welch as too small to be taken into account, and also rejecting the Indians, we may derive the following figures[2] of the population of North Carolina for 1760:

English	45,000
Scotch (Highlanders and Scotch-Irish)	40,000
Germans	15,000
Negroes	30,000
Total	130,000

Such are the people who have made the history of North Carolina and from whom the modern North Carolinian has sprung. He cannot be understood unless the origin and influences that have shaped his life are understood. He possesses the Englishman's love of home, hatred of tyranny, and respect for constitutional forms and precedents; the Highlander's unflinching loyalty to a cause or a leader, high sense of personal dignity and honor, and intense passions usually well under control, but fierce and terrible when aroused; the Scotch-Irishman's deep spiritual nature, stern uncompromising religious faith, and devotion to religious liberty; and the German's simplicity of manner, frankness of speech, and honest shrewdness in business.

There has been very little immigration into North Carolina since late in the eighteenth century. The population of the state today is a blend of the above sturdy stocks.

Happy it was for her that her coast was such that she was settled not from the sea but in the main by people who drifted into her confines from other parts of the country and who were drawn from three or four sturdy stocks. Happy it was for these people that after a time this immigration dwindled and then ceased, leaving the settlers to blend into a composite element, with more in common in the mass than the people probably of any other state. Happy, finally, supremely happy it would seem, that this blending process was prolonged, so that those who underwent it were disciplined and seasoned and ripened for their great opportunity when it did come. It is to the seizing of that opportunity that North Carolina owes its present position.[3]

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[2] Connor, *Race Elements.*

[3] R. H. Latham in Memorial Day Address, U. N. C., Oct. 12, 1928.

A Militant Mediocracy. Judge R. W. Winston has developed the thesis that North Carolina's recent progress and her present status are the products of a "militant mediocracy."[4] In other words, North Carolina never had a large aristocracy or many indentured servants, but she had something that her sister states never did have—a great mass of middle-class folk.

> Her early settlers were for the most part plain people, neither rich nor aristocratic. "To be rather than to seem" her motto, North Carolina was willing to fight but not to brag about it. She cared nothing for state archives, historical associations, or written history. . . . North Carolina's development is the triumph of a vigorous middle class. The state never had the aristocratic tradition of either Virginia or South Carolina. To be sure it had its planter class, the members of which cherish their escutcheons and family trees as the Virginia and South Carolina grandees cherish theirs; but this favored company never established itself so firmly in a holy of holies as its blood brethren to the north or south. It was closer to the ground, and when the big smash came the aura which had surrounded it was dissipated more quickly.
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> The more complete dominance of an upper class in Virginia had its advantages. It was favorable to the growth of culture. No unbiased observer of the life of these two neighbors, no student of history can fail to find that North Carolina has been behind Virginia in polish, in the amenities of intercourse, in devotion to things literary and artistic.
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> The lesser gap between high and low in North Carolina in antebellum days has been reflected in a greater readiness to welcome new ideas, a lack of reverence for old allegiances and preconceptions. True, the dead hand of the past seemed to have as firm a grip here as elsewhere in the first quarter of a century after Appomattox, but more recent events have proved that this was not so.[5]

Someone has summed up the situation more briefly by saying that "North Carolina has been able to progress because she has not had so many things to forget."

The thesis of Judge Winston, also developed by others, is borne out by the respective census records from 1790 to 1860. Each census from 1790 to 1850 showed Virginia ranking first in slaves and South Carolina second. Virginia led in slaves in 1860, and North Carolina ranked seventh. In proportion of slaves to the total population, North Carolina shared with Virginia seventh place in the South.

The 1850 Census shows that large holdings of slaves prevailed more in several other southern states than in North Carolina. Out of 67 slaveholders in the South owning more than 300 slaves each, North

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[4] *The Nation,* Feb. 21, 1923.

[5] *Ibid.*

Carolina had only three. A large majority of our slaveholders held from one to ten slaves apiece. Approximately three-fourths of the white families of the state owned no slaves at all.[6] We had about our share of slaves, taking the South as a whole, but they were not so generally on large plantations.[7] Indeed a large per cent of the slaves were house servants.

The slaves were generally concentrated in those counties that grew cotton and tobacco, although they were not devoted wholly to the production of these two crops, as is so often assumed.[8] In other words, the present Negro belt is merely an extension and expansion of the old slave belt. The counties along the coast, the central and southern Piedmont counties, and the Carolina Highlands contained only a few slaves. It is this Piedmont country, settled by small home-owning whites (German, Scotch, and Irish), that was least affected by the Civil War and that today leads the South in industrial development, in population growth, and in wealth accumulation.

Physical Features. The third factor that helped to shape the destiny of the state was the nature of her shore line, which made access from the sea rather difficult. The shore line is formed by a long series of sand reefs which make the coast of North Carolina unique. Its character is indicated by the names of two of its most conspicuous points, Cape Fear and Cape Lookout, while the third, Cape Hatteras, is known as the graveyard of the Atlantic. Between the sand reefs and the mainland are four large sounds—Albemarle, Pamlico, Core, and Bogue—which cover an area of approximately 3,670 square miles.

> They are veritable inland seas upon whose bosoms one would quite naturally expect to find an extensive commerce, and along whose shores one would naturally look for greater commercial cities. But nature has forbidden! Here and there, indeed, the waters of the Atlantic break through the sandbars to mingle with the waters of the sounds, but the inlets through which they are united are so shallow, so treacherous, and so constantly shifting that they repel rather than invite commerce. . . .
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> But for the peculiar character of this coast, North Carolina would have been the scene of the first permanent English settlement in America; as it was, it was one of the last of the original thirteen colonies to be actually settled. In 1585 Amadas and Barlow, explorers in the employment of Sir Walter Raleigh, described this region as "the Paradise" of the world, and yet nearly three-quarters of a century passed before settlers sought out this "Paradise" as a desirable place

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[6] There were 28,303 slaveholders out of a white population of 553,028. 1850 Census.

[7] For the details see the 1850 Census, chap. V.

[8] A study of the censuses up to 1860 shows that the South was a great food producing area. The change came when tenancy supplanted slavery.

for building homes.[9]

Paul Barringer sheds further light on this point:

> In the twenty years following the settlement of Jamestown nearly ten thousand colonists passed into Chesapeake Bay, not forty leagues to the north, yet not one ship landed a passenger on this coast. In 1660 . . . some ships from New England sailed up the Cape Fear and landed a colony on the south bank, but in three years they were gone. Again, in 1664, a colony from the English settlements in Barbadoes moved to this river; . . . and several hundred settlers took up the river front for many miles, and yet in three years they also had departed. When the final settlement of this river was made, in 1731, it was made by men who came from the south, sixty-five years after the first attempt. In fact, all the coastal rivers of North Carolina were of so little use that, although the settlements were made on their banks, they were settled from above down, instead of from the coast up, as in every other colony. More strange still, colonists leaving Europe for these shores, as the Swiss and Palatines, came first to Virginia and then by a toilsome overland journey back almost to within sight of the sea they had sailed.[10]

Thus the peculiar physical conditions along our shore line determined the fact that North Carolina should not be settled by colonists coming directly from Europe, but by overflows from her neighbors. North Carolina was a frontier to all English settlements, and this fact, according to Professor Connor, determined the character of her society for the first five decades of her existence. Naturally not many of this overflow were of aristocratic tradition. Nor were they, as Lodge and others would have us believe, outlaws and cutthroats. They were good, energetic, independent, middle-class people, many of whom later became aristocrats (slave owners); but, generally speaking, they and their descendants remained in that great middle class of small home-owning farmers who have characterized North Carolina, especially the western half of the state.

GROWTH OF POPULATION

In 1790, when the first census of population was taken, North Carolina had a population of 393,751. Only two states, Pennsylvania and Virginia, had more inhabitants. In 1850 there were nine states that had more inhabitants. The following table presents the findings of the censuses for the years given. The per cent increase refers to the rate of increase during the preceding decade.

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[9] Connor, *North Carolina: Rebuilding an Ancient Commonwealth*, vol. I, chap. 1.

[10] *Influence of Peculiar Conditions in the Early History of North Carolina.*

POPULATION BY DECADES

Year	Inhabitants	Rank in Population	Per Cent Increase	Per Cent Increase	
				Slaves	Whites
1790	393,751	3	...	....	....
1800	478,103	4	21.4	32.53	17.19
1810	555,500	4	16.2	26.65	11.44
1820	638,829	4	15.0	21.43	11.36
1830	737,987	5	15.5	19.79	12.79
1840	753,419	7	2.1	0.08	2.54
1850	869,039	10	15.3	17.38	14.05
1860	992,622	12	14.2	14.70	13.90
1870	1,071,361	14	7.9		
1880	1,399,750	15	30.7	(A later table shows increase of Negroes and whites since 1860)	
1890	1,617,949	16	15.6		
1900	1,893,810	15	17.1		
1910	2,206,287	16	16.5		
1920	2,559,123	14	16.0		
1928	2,938,000*	..	...		

* Census estimate.

Except for two decades, 1830-40 and 1860-70, the rate of population growth has been fairly constant. The small increase between 1830 and 1840 was due to migrations from North Carolina, largely to Indiana and adjoining states. The small increase during the 1860-70 decade was due largely to deaths resulting from the Civil War. The growth has been not only constant, but healthy. Practically no immigrants from foreign countries have come into North Carolina for more than one hundred years, and during the last hundred-odd years we have sent into other states many more people than we have received from other states. During the era of slavery, thousands of non-slaveholding whites left North Carolina for the free states, both to escape class distinctions and to secure more fertile farms. Whatever we gained from slavery was more than offset by the loss of these splendid whites to other states, together with the failure of high grade immigrants to come to the state.

The census records following 1790 show that the increase of white population in North Carolina was below normal, while the increase of slaves was rather large. (Incidentally, it is interesting to note that there were 30,463 free Negroes in the state in 1860, against 4,975 in 1790.)

Nativity of White Population. Two very interesting as well as significant facts concerning our population are: (1) North Carolina's present inhabitants are of native birth; and (2) since the early days we have been a population-exporting state.

The first point can be illustrated by referring to the 1850 and 1920 census reports. In 1850, of our total white population, 95.74 per cent were born in the state; 3.76 per cent were born out of the state, but in the United States; and only .46 per cent were of foreign birth. At that time North Carolina had the highest ratio of native- (state) born whites among all the states, and the smallest ratio of people of foreign birth. The 1920 Census shows that North Carolina still has the largest percentage of native-born inhabitants. Only three out of every thousand whites in 1920 were of foreign birth. There were only 7,099 foreign-born whites in the entire state, and only 11,477 native whites of mixed or foreign parentage. This fact is a matter of great pride to almost all people in the state. We do not care for the type of immigrant that comes to the United States today, but how much North Carolina has lost in the past by her failure to secure any of the North European immigrants who came over during the nineteenth century is beyond calculation. There is as much point in bragging about being nearly 100 per cent native-born as there is in claiming we are 100 per cent pure Anglo-Saxons (whoever they are), when 29.8 per cent of our population is made up of Negroes.

The second point can be illustrated by referring to the 1860 and 1920 census reports. The 1860 Census shows that there were 272,606 native free inhabitants of other states who were born in North Carolina. The native free population born in North Carolina but residing in other states in 1860 was equal to 43 per cent of our resident native free population. While there were 272,606 people born in North Carolina but living in other states in 1860, there were only 23,845 people born in other states but living in North Carolina! Only two states, South Carolina and Delaware, had received fewer people from other states. The excess of living people given by North Carolina to other states was 248,761, and only three states had given larger excesses—New York, Pennsylvania, and Virginia.

In 1920 there were 443,844 people born in North Carolina but living in other states.[11] The inhabitants of North Carolina born in other states numbered 157,996, making a net loss sustained of 285,848. Only five states had contributed more people to North Carolina than they had received from North Carolina. The net losses to 42 states and the District of Columbia ranged from 123 to Nevada to 75,918 to Virginia.

It is very probable that North Carolina will not continue to suffer net losses to other states. The 1910 Census reported 75,073 natives of other states living in North Carolina, while the 1920 Census reported 157,996. We still export people, but for the first time in more than a hundred years we are importing from other states in fairly large numbers. There has been a marked drift into North Carolina from adjoining states, and to a lesser degree from more distant states, since 1920.

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[11] Abstract 1920 Census, table 64.

Many of those who chose to leave North Carolina later rose to positions of fame and power. In fact, the people who have become famous after leaving the state probably outnumber those who have achieved fame within the state.

To 21 states in the Union we have furnished 79 Congressmen and Senators, three Presidents, two Vice-Presidents, five presidents pro-tem of the Senate, eight members of the Cabinet, five secretaries of the Navy, two secretaries of the Interior, and one of Agriculture.

In the religious world are Bishops Polk of Louisiana, Davis of South Carolina, and Fitzgerald of Texas; Dr. Smith of Louisville, Drs. Dixon and Broughton of London, Hawkes, Greene, and Paine of Mississippi; and Beckwith of Georgia.

To the educational world North Carolina has contributed such men as Dr. H. H. Horne of New York University; Dr. Elliott of Johns Hopkins; and Dr. Charles Hughes Johnston of the University of Illinois.

To the sister state of Virginia we have contributed Dr. E. A. Alderman, Dr. Paul Barringer, Dr. W. W. Moore, Dr. R. H. Whitehead, Dr. Henry L. Smith, Dr. C. A. Smith, Mr. Herbert W. Jackson, Mr. Henry E. Litchford, Mr. Edmund Strudwick, Mr. T. S. Mulford, and Mr. F. H. Royster. To be anybody in Virginia you have to belong to either the F. F. V.'s or the N. C. O.'s, which being interpreted means the First Families of Virginia, or the North Carolina Oligarchy.

Nor does this record stop short of such names as those of the great national figures, Dr. Joseph Holmes, Dr. P. P. Claxton, and Dr. Hannis Taylor.[12]

The 1926-27 edition of *Who's Who* contains the names of 385 persons who gave North Carolina as their state of birth. There were 305 names in *Who's Who* whose residence was given as North Carolina but many of whom had come from other states. In other words, the state has given birth to a large number of living notables who reside in other states. She seems to have been a better seed-bed for breeding notables than a plant-bed for maturing them. However, this has been truer of the past than it is of the present. Our own pastures are now green, and the ambitious and energetic can grow to full stature at home.

Taking the 385 persons in *Who's Who* born in North Carolina, and using the 1870 population, the year nearest the date of birth of these persons, we get a rate of 36 living notables per 100,000 inhabitants.[13] On this basis North Carolina ranks thirty-eighth among the states, the states below ours all being southern except New Mexico. Excessive ruralism and large Negro populations largely explain the rank of North Carolina and the other southern states. That our native white people are inherently capable, given opportunities, has been demonstrated time and again, first by the degree of success achieved by those who have left the state, and second by the progress that the state has made during the last quarter century, progress which has been achieved almost unaided from outside people or capital.

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[12] P. D. Gold, Jr., before the North Carolina Society, Washington, D. C., 1915.

[13] States ranked in *News Letter,* vol. XII, no. 49.

Race Ratios

North Carolina is in what is known as the Negro Belt. In 1920 the Negroes constituted 29.8 per cent of the total population. There were seven states that had larger Negro ratios. The Negro ratio is on the decline. From 1790 to 1880 the Negro population ratio increased every decade except one, 1830-40. Since 1880 the white population ratio has increased every decade. In 1880 the white ratio was at its lowest point, 61.96 per cent. By 1920 it had risen to 69.70 per cent. The per cent increase of the white population has averaged approximately twice as high as for the Negroes for every decade since 1880. The following table based on the 1850 and subsequent census reports gives interesting population ratio facts about North Carolina by decades from 1790 to 1920.

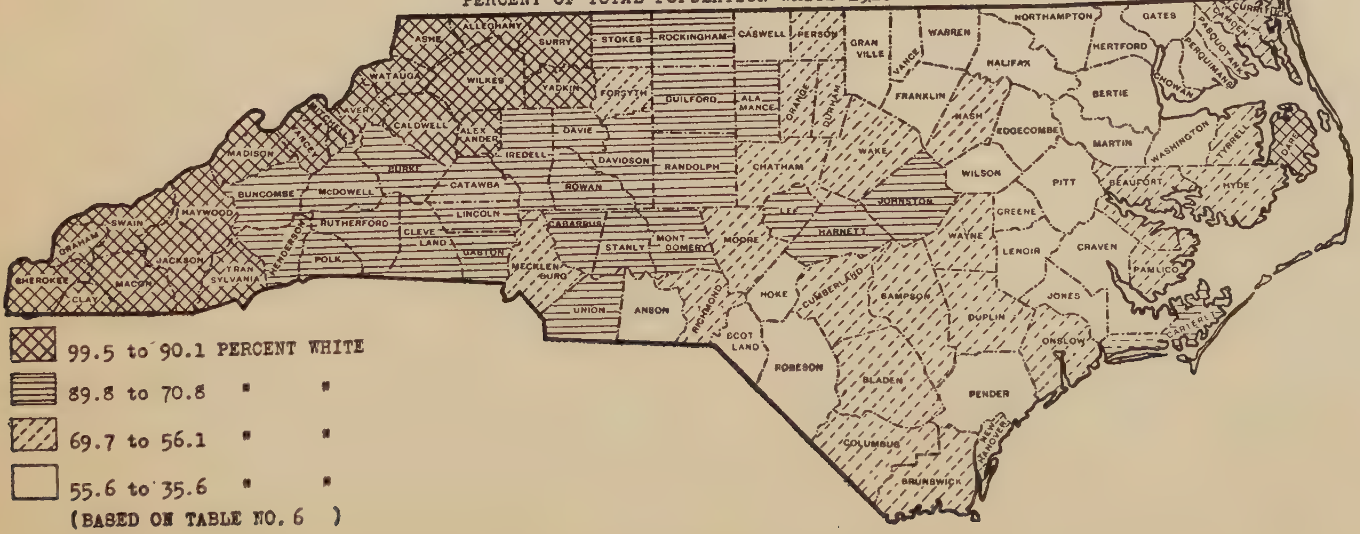
RACE RATIOS AND RACE GAINS 1790-1920

Year	White Population	Negro Population	Per Cent White	Per Cent Increase White	Per Cent Increase Negro
1790	288,204	105,449	73.19	....	....
1800	337,764	140,339	70.65	17.19	33.20
1810	376,410	179,090	67.76	11.44	27.50
1820	419,200	219,629	65.62	11.36	22.67
1830	472,843	265,144	64.07	12.79	20.72
1840	484,700	268,549	64.36	2.54	1.28
1850	553,028	316,008	63.64	14.05	17.68
1860	629,942	361,522	63.46	13.90	14.40
1870	678,470	391,650	63.19	7.73	8.33
1880	867,242	531,277	61.96	27.81	35.67
1890	1,055,382	561,018	65.20	21.70	5.59
1900	1,263,603	624,469	66.70	19.73	11.32
1910	1,500,511	697,843	68.00	18.75	11.73
1920	1,783,779	763,407	69.70	18.88	9.45

While some Negroes are found in every county in the state, the great majority are concentrated in the cotton and tobacco growing counties, along with two tobacco manufacturing counties where Negroes are employed in large numbers in the tobacco factories. The Negro ratio ranges from less than one-half of 1 per cent in Mitchell, a mountain county, to 65.2 per cent in Warren County, which was one of the slavery counties in the old tobacco belt. There were 13 counties which in 1920

NORTH CAROLINA

PERCENT OF TOTAL POPULATION WHITE 1920 CENSUS


▩ 99.5 to 90.1 PERCENT WHITE
▤ 89.8 to 70.8 " "
▨ 69.7 to 56.1 " "
☐ 55.6 to 35.6 " "
(BASED ON TABLE NO. 6)
ALLEGHANY
ASHE
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
HERTFORD
HALIFAX
VANCE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
BERTIE
CHOWAN
MITCHELL
AVERY
CALDWELL
ALEX ANDER
DAVIE
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BURKE
BUNCOMBE
MCDOWELL
CATAWBA
ROWAN
JOHNSTON
GREENE
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
LINCOLN
CLEVE LAND
CABARRUS
LEE
HARNETT
WAYNE
CRAVEN
HENDERSON
MONT GOMERY
MOORE
LENOIR
JACKSON
POLK
GASTON
STANLY
PAMLICO
CHEROKEE
MACON
TRAN SYLVANIA
MECKLEN BURG
CLAY
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
JONES
DUPLIN
SCOT LAND
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

had Negro majorities, while in several others from 40 to 50 per cent of the population was Negro. All of the counties with as many as one-third of their population Negro are in the eastern half of the state. The eastern counties and several counties along the South Carolina border have made large gains in Negro farmers since 1920. It would not be surprising if a few additional eastern counties should show Negro majorities in 1930. In 18 counties the farms operated by Negroes increased 50 per cent or more from 1910 to 1925.

In 1920 Negroes were 29.8 per cent of the population, while 28.5 per cent of all farms were operated by Negroes. Counting Negro laborers on the farm, it is likely that the Negro farm population ratio is slightly in excess of the Negro population ratio.

The 1925 Census of Agriculture reports that 27.3 per cent of the Negro farmers of the state are full or part owners of their farms. The number of Negro farm owners is steadily increasing. The ratio of owners is inversely in proportion to the race' ratio. That is, the per cent of Negro farm ownership is highest in areas of low Negro ratios. This is almost without an exception. It is lowest in the combination cotton-tobacco belt where Negro ratios and density are highest. In the mountain counties and in many Piedmont counties a large per cent of the Negroes own their homes and farms and have accumulated a considerable sum of wealth.

Occupational Groups

This study would be incomplete without reference to occupational groups or the distribution of population by occupations. The table[14] on the next page gives the number of people ten years of age and over, both races and sexes, engaged in gainful occupations outside the home in 1920 and in 1910.

Farm workers and foresters still outnumber all other occupational groups combined, but the ratio of gainfully employed engaged in agriculture and forestry is rapidly declining. The urban occupational groups are increasing at a very rapid rate. For 200 years agriculture, forestry, and other extractive activities were almost the sole sources of income in North Carolina. During the last quarter century our economic foundation has been greatly changed.[15]

Conclusion

In this chapter an attempt has been made to outline the population

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[14] Based on the 1910 and 1920 census reports, discussed in detail in the *News Letter,* vol. VIII, no. 5. See next page.

[15] Discussed in chap. XII.

Occupation Groups	1920	1910	Ten-Year Increase	Per Cent Increase
Agriculture and forestry	477,543	611,567	134,024*	22*
Mftre. and mechanic industries	211,019	136,844	74,175	54
Domestic and personal service	56,534	67,223	10,689*	16*
Trade and banking	52,931	36,607	16,324	44
Transportation	36,331	25,083	11,248	45
Professional service—doctors, teachers, lawyers, preachers	29,749	17,213	12,536	73
Clerical occupations—cashiers, bookkeepers, stenographers, canvassers, etc.	20,509	10,249	10,260	100
Public service—officeholders	9,003	2,600	6,403	247
Miners and quarrymen	2,002	952	1,050	110
Grand total of workers	895,621	947,839	52,218*	6*
Population of state	2,559,123	2,206,287	352,836	16
Ratio of workers to total population	35	43	......	8*
Ratio of workers to population 10 years old and over	48.6	60	......	11.4*

* Decrease.

background of modern North Carolina, without some knowledge of which it would be impossible to understand the economic and social conditions that exist in the state today. Many who have written about our people have not taken the trouble to get at the facts. Many have written, not to tell the truth, but to prove one viewpoint or another. Our people have been maligned on the one hand and glorified on the other, according to the prejudice of the particular writer. Few have ever attempted to write an accurate account of the origin and development of our population, and no complete statistical analysis has been made. Only a partial survey is possible in this prefacing chapter. The interested student will find worlds of additional information in the more or less neglected census volumes from 1790 to date and a few well-known references. Especially interesting and valuable is the 1850 Census, which contains many complete records for the period from 1790 to that time.

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The Library, Rural Social-Economics Dept., contains extensive files.

CHAPTER V

PHYSICAL AND SOCIAL-ECONOMIC AREAS

It has been our purpose in the foregoing chapters to define the physical areas of the state and to give the important population characteristics with respect to them. It seems suitable at this point to go further into the broad physical areas, then briefly to run over the social-economic factors resulting from the divisions. For it cannot be too strongly emphasized that as a result of the main geographic sections of the state, North Carolina is divided into four clearly marked social-economic provinces. These geographical areas from east to west are, as we have seen, Tidewater, West Coastal Plain, Piedmont, and Mountain, although the Tidewater and West Coastal Plain are often spoken of as one, the Coastal Plain. This whole region is of the same general origin, but it has two distinct social-economic divisions. There runs across the state, and somewhat parallel with the shore line, what is known as the fall line, cutting the state into two regions of about equal size. East of this line the soils are of sedimentary origin; west of the line they are mainly of igneous origin. In other words, North Carolina is divided into two great soil or physical provinces, the east and the west, an enormous factor throughout the history of the state. It is no less important today than it has been in the past. No other state on the Atlantic seaboard is so clearly marked off in this respect. The east is more or less clearly divided into two provinces of about equal size; the west is definitely divided into two provinces, the Piedmont being considerably larger than the Mountain region.

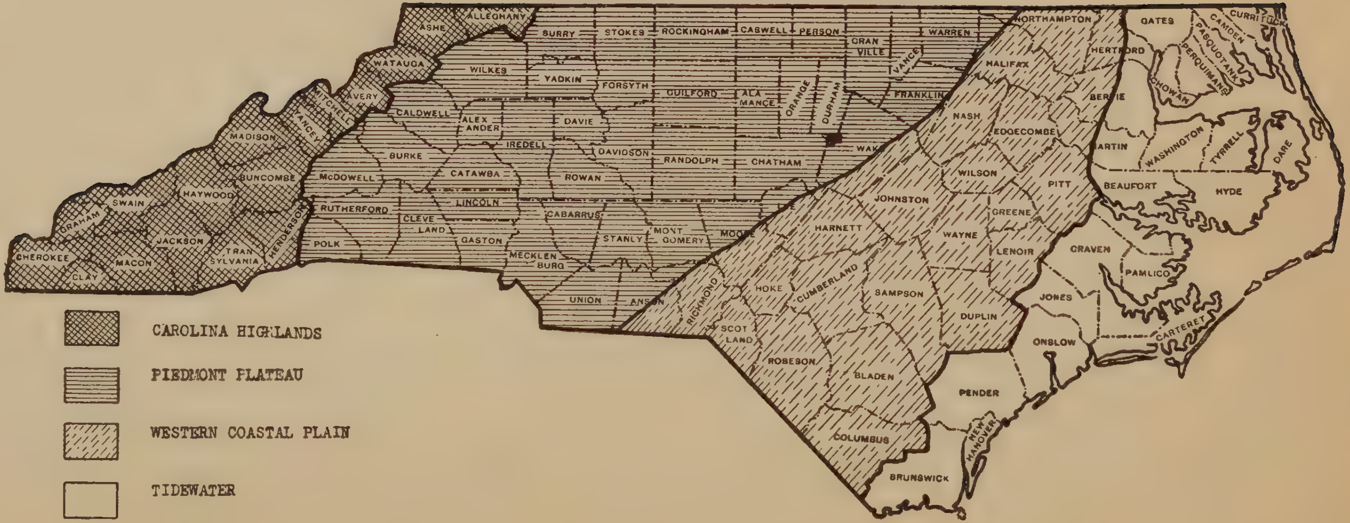
Historic Influence

Throughout the history of North Carolina the east has been arrayed against the west. At times there have been bitter controversies, but for the most part the two regions have lived together in friendly rivalry.

The War of the Regulators, which culminated in the battle of Alamance in 1771, was a struggle between the small farmers of the upcountry and the great planters of the lowlands for political power. In the Convention of 1788 every county except Lincoln which voted for the ratification of the Federal Constitution, was located in the Coastal Plain, while every county in the Piedmont, with the same exception, voted against ratification. The long contest over the call of a convention to amend the state constitution, which culminated in the Convention of 1835, was likewise an east and west contest for political and economic supremacy; in 1834 every county in the Coastal Plain voted

NORTH CAROLINA

THE GEOGRAPHIC DIVISIONS OF NORTH CAROLINA


ALLEGHANY
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PERSON
GRAN VILLE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
HERTFORD
CHOWAN
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
VANCE
FRANKLIN
HALIFAX
BERTIE
AVERY
MITCHELL
YANCEY
CALDWELL
ALEX ANDER
DAVIE
NASH
EDGECOMBE
ARTIN
WASHINGTON
TYRRELL
DARE
MADISON
BURKE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAK
WILSON
PITT
BEAUFORT
HYDE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
JOHNSTON
SWAIN
HAYWOOD
RUTHERFORD
LINCOLN
CABARRUS
GREENE
GRAHAM
HENDERSON
CLEVE LAND
HARNETT
JACKSON
POLK
GASTON
STANLY
MONT GOMERY
MOO
WAYNE
LENOIR
CRAVEN
CHEROKEE
MACON
TRAN SYLVANIA
MECKLEN BURG
PAMLICO
CLAY
UNION
ANS
RICHMOND
HOKE
CUMBERLAND
SAMPSON
JONES
DUPLIN
SCOT LAND
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
▩ CAROLINA HIGHLANDS
▤ PIEDMONT PLATEAU
▨ WESTERN COASTAL PLAIN
☐ TIDEWATER

against the call of a convention and afterwards, in 1835, against the ratification of its work, while every county in the Piedmont Plateau voted in the affirmative on both occasions. The same line of cleavage, though not so marked, is seen in the vote on the proposition to call a convention in February, 1861, to take North Carolina out of the Union, and also on the suffrage amendment of 1900. "The political questions in North Carolina," to quote Professor Cobb, "have always been questions of east and west, of the up-country against the lowlands, of crystalline schists and granites against unconsolidated clays, sands, and gravels."[1]

For a long time the conflict lay between the planters of the east and the small home-owning farmers of the west, with the east in the saddle. As a result of population growth, the strangle hold of the east was finally broken. The chief conflict today lies between the farmers of the east and the factories of the west, with the west holding the whip hand, for today the west has a majority of the population and wealth of the state.

Other evidences of east and west conflict are seen in the presence of two literary societies at the State University, one catering to the boys from the east, the other to boys from the west; and in high school athletics and other contests in which the final battle is always between representatives of the two sections. In the legislative vote on the secret or Australian ballot in 1929, chief opposition came from the east, chief advocacy from the west. Today the stronghold of the Democratic party is eastern North Carolina, of the Republican party, western North Carolina. The cleavage is the result of economic, racial, and historic conditions. As has been noted, the chief conflict of interests today is between the agricultural civilization east of the fall line and the urban-industrial civilization west of the fall line. The chief point in the conflict is over the question of taxation. On this point the east gains much support from the rural counties of the west.

So much by way of introduction. Many of the points referred to in the outline are covered in more detail in the chapters that follow. Others are drawn from such a large number of tables, maps, and charts that lack of space prevents their inclusion in this work.[2] No point is made that is not amply substantiated by trustworthy data.

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[1] Connor, *North Carolina*, vol. I, ch. 1.

[2] Around 3,000 tables and maps have been prepared by the Department of Rural Social Economics, at the University of North Carolina, and are properly filed away in the department library, which contains the greatest collection of home-state economic and social data to be found in any state. Helping to assemble these data has taken the major part of the author's time for fourteen years.

The Coastal Plain

The Coastal Plain is the name applied to the low and partially submerged area of varying width that is confined between the Piedmont Plateau on the west and the continental shelf on the east. Its western boundary passes through Northampton, Warren, Halifax, Franklin, Wake, Johnston, Chatham, Moore, Richmond, and Anson counties. It naturally falls into two divisions—a submerged or submarine division and an emerged or subaerial division, the seashore forming the boundary line between them. This line of demarcation, although apparently fixed, is in reality very changeable, for during the geologic ages which are past it has migrated back and forth across the Coastal Plain, at one time occupying a position well over the Piedmont Plateau, and at another far out at sea. At the present time there is reason to believe that the sea is encroaching on the land by the slow subsidence of the latter, but the period embraced by a few generations of men is too short in which to measure this change.[3]

Along the western margin the Coastal Plain is often hilly, the streams frequently cutting through the softer Coastal Plain deposits to the harder rocks of the Piedmont Plateau below. Several of the more important cities of the South are located on the fall line, which marks the head of navigation of the rivers. In North Carolina the rivers, entering the softer sedimentary soils, cut into them, the result being rapids that have been harnessed for the development of electric power. Roanoke Rapids is an illustration.

Along the western border of the Coastal Plain is the famous Sandhill country. The Sandhills often appear as outliers on the Piedmont Plateau, where they attain elevations of from 400 to 500 feet. These Sandhills were probably formed in somewhat the same manner as the sand dunes along the "banks" today.

East of the Fall line, the country declines in altitude, passing from one broad plain or terrace to another until it approaches tide-level, when it embraces swamps, marshes, bays, and sounds over wide areas—the whole surface for more than 50 miles inland from Hatteras and the Eastern Shore being less than 20 feet above sea-level. The ocean is walled off from this low region by a long linear chain of sand islands or dunes, ranging from 75 to 100 feet and upwards in height and separated in half a score of places by inlets which connect the sounds with the ocean. The total width of the plain reaches 125 miles. Its area is about two-fifths that of the state, exceeding 20,000 square miles and embracing wholly or in part 42 counties.[4]

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[3] *The Coastal Plain of North Carolina,* chap. 1.

[4] *Loc. cit.*

For 50 miles or so the continental shelf slopes out into the Atlantic, the submarine part of North Carolina constituting an area of approximately 15,000 square miles.

The submarine division of North Carolina consists of one terrace, the subaerial division of six. These terraces are the products of the numerous incursions and excursions of the Atlantic, which, as has been noted, appears to be coming in again. They are, beginning with the highest, the Lafayette, represented in North Carolina by the sandhills of Scotland, Richmond, Cumberland, Moore, Harnett, Wake, Johnston, Nash, Halifax, and Northampton counties; the Coharie, which is found in the region to the east of the sandhills in Scotland, Robeson, Cumberland, Harnett, Sampson, Johnston, Wilson, and Nash counties, along its inner edge having an elevation of 235 feet from which it slopes gradually to the eastward, with elevations of 160 to 180 feet along its outer border; the Sunderland, found principally in Robeson, Columbus, Bladen, Cumberland, Sampson, Duplin, Wayne, Johnston, Greene, Wilson, Edgecombe, Nash, Halifax, and Northampton counties, varying from 5 miles in width in the northern counties to 40 miles in places near the South Carolina border; the Wicomico, the largest areas being found in Halifax, Edgecombe, Martin, Lenoir, Craven, Jones, Duplin, Onslow, Pender, Bladen, and Columbus counties, characterized by numerous swamps and poor drainage; the Chowan, found chiefly in New Hanover, Bladen, Columbus, Pender, Onslow, Jones, Pamlico, Carteret, and Craven counties, and to a lesser extent in several other eastern counties, varying in elevation from around 60 to 30 feet, and containing much undrained land and swamps; the Pamlico, covering the entire area of Hyde, Dare, Tyrrell, Currituck, Camden, and Pasquotank, and much of Perquimans, Chowan, Washington, Beaufort, Pamlico, Craven, and Carteret counties. Its elevation varies from 20 feet along its western border to tide level. The surface of the Pamlico terrace is covered over wide areas with swamps and marshes and embraces many estuaries, sounds, and bays, including the Great Dismal Swamp and Mattamuskeet Lake.[5]

Along the coast are the famous banks, beaches, reefs, spits, and sand dunes, having been built up from deposits brought down by the streams, which, being met by breakers coming in from the sea, have caused a great reef to be heaped up parallel to the general trend of the shore line. The reefs reach a very much higher elevation than the adjacent mainland. The sand dunes formed on these reefs attain in the Kill Devil Hills in Dare County an elevation of 100 feet or more. It was from these Kill Devil Hills that the Wright brothers made the first successful flight by airplane, an event appropriately commemorated in 1928.

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[5] *Ibid.*

It is thus seen that the whole eastern portion of the state is a vast plain, stretching from the seacoast into the interior of the country, a distance of from 100 to nearly 150 miles in places. From east to west the surface rises at an average rate of about one foot to the mile, the rise being scarcely perceptible to the traveler. Though generally almost level, it is relieved by slight undulations and low rolling hills along the western border. Over this whole area the rock foundation is covered with a layer, or, more accurately, many layers of sedimentary deposits, varying in depth from zero, where it dovetails with the Piedmont along the western border, to around 2,000 feet in the southeast along the coast. It is claimed that the Carolina Central Railroad, which traverses this region, has a stretch of 100 miles where there is not a curve, excavation, or embankment. The Atlantic Coast Line from Wilmington to Goldsboro contains a straightaway of 44 miles. These facts illustrate the physical nature of the region.

The Tidewater Region

The Coastal Plain, although of one geologic origin, comprises two rather distinct physical and social-economic provinces, the Tidewater and Western Coastal Plain. The Tidewater is that vast low-lying, flat, swampy, and generally wet country of extreme eastern North Carolina. Roughly, it extends to the interior as far as the effects of the tides are visible, being much wider in the northeastern part of the state, and embracing one tier of counties along the southern area. Its width varies from about 80 miles to around 30 or 40. There is no clear line of demarcation, any line drawn being at best only approximate. Ordinary field observation and studies of statistical data clearly show the existence of a region quite distinct from the adjacent area to the west—in soils, drainage, elevation, climate, race ratios, density of population, crops, and in numerous other ways.

Outstanding Characteristics. The Tidewater region is very sparsely settled, only one county, New Hanover, having a population density equal to the state average. Although the first part of the state to be settled, it is today the most sparsely settled part of the state, excepting the southwestern mountain counties. The region has vast possibilities and could support a very dense population. Few areas in America possess such unused resources.

The Tidewater is an area of static population, in other words, an area of slow growth for some counties and actual losses for others. From 1910 to 1920 only one county experienced an increase of population above the state average growth of 16 per cent. Nine counties actually lost population, and except for three counties, those that increased made only nominal gains.

This is an area of excessive rural ratios, there being only one really large town in the whole region, although there are other sizable places. The rural ratios are considerably above the average of the state, which itself is excessively rural.

The Tidewater is an area of few farms, with only a small per cent of the land area under cultivation. Except for the five counties north of Albemarle Sound, no Tidewater county approaches the state average per cent of land area under cultivation. For the entire area approximately one-ninth of the land area is classed as improved land.

This is an area of fairly large Negro population ratios, except for Dare and Carteret counties. The Negro population has gained considerably since 1910. There has been a large increase of farm tenancy within recent years, as cotton and tobacco crops have gained in importance.

The region is characterized by excessive individualism, due to sparse population, poor transportation facilities, and racial origins or tradition. Transportation facilities are poor because of the small demands for them, due to the physical nature of the region and to too sparse population. It is an expensive region in which to build highways and railroads.

Physiography. The Tidewater country, as has already been noted, is a low-lying, level, swampy, and generally wet region. The area contains more than 3,000,000 acres that are too wet for cultivation. Part of the wet lands have been drained; the remainder must be drained before it can be utilized for agricultural purposes. A large per cent of the land area is very fertile and produces or will produce crops in rare abundance. The soils have a wide range in texture and structure and are adapted to a great variety of crops. There are large areas of black lands, swamps, and muck soils. The sandy loam uplands probably constitute the best all-round agricultural soils of the region. While there is a large amount of highly productive land, actual and potential, there is much land whose texture and composition render it largely worthless.

The climate of this area is very mild and equable throughout the year. Eastern North Carolina juts out into the Atlantic, almost the entire Tidewater country lying east of a line connecting southeastern Virginia and northeastern South Carolina. This fact has its influence on the climate. Winds from the ocean and off the Gulf stream from the south make the climate equable. Also the large bodies of shallow water absorb and radiate heat, which has the same effect. The average annual temperature ranges from 63 to 60 degrees. The growing season averages around 220 days or better, being longer than in any other section of the state. Semitropical plants thrive in the southeastern part of the state. The annual precipitation is from 50 to 55 inches, the slight excess being due to the near-by ocean and sounds.

This region was originally covered with a dense forest. The original forest growth has been harvested. The area now comprises large areas of waste land, although there is much second growth timber. The lumber mills, the turpentine industry, forest fires, and free range pasturing have depleted and kept at a low point the forest resources of eastern North Carolina. This is almost equally true of every region of the state.

Economic Foundations. Practically the entire population of this area makes its living directly or indirectly by extractive industry. The great bulk of the people live directly by farming. Cash crop farming is not nearly so important as it is a few miles to the westward. The practice is to diversify, especially in the northern half of the area. The chief crops are corn, cotton, peanuts, soy beans, sweet and Irish potatoes, and a great variety of truck crops. Hogs and other livestock supply the family needs and add to the farm income. There are many prosperous farms in the area, and much visible evidence of the general advantages of a well balanced agriculture. Cash crops, especially cotton and tobacco, are of increasing importance. The Tidewater area of North Carolina was designed by nature to become a great truck producing region. There is little doubt but that its chief development in the future will be along this line.

Albemarle, Pamlico, and the other sounds, and the rivers and the ocean afford some of the greatest fishing possibilities in the United States. The oyster possibilities are almost limitless, while the income from crabs, scallops, and other seafoods could be greatly increased.[6]

Lumbering is still an important source of income, with great possibilities for the future. By an intelligent system of forest conservation and reforestation this area could be made to yield many millions of dollars annually in forest products.

There is practically no manufacture carried on in this area. There are ten textile mills, a few fertilizer factories, sawmills, and other minor establishments, the total value of whose output is very small. This area will probably never develop the industries that characterize the western part of the state, but it has vast latent possibilities in the establishment of such agricultural industries as canning, pickling, and preserving, in the development of industries utilizing soy beans, peanuts, cotton seed, and non-food fish, and in processing the products of the sea. There are good possibilities for a large number of small industries which, after all, would be better than a few large industries.

The volume of trade is not large, being smaller only in the mountain counties. Trade is mainly with country people, and largely on Saturday afternoons. Sparse population and live-at-home farming are not conducive to brisk trade.

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[6] See chap. III.

Bank resources are small indeed. Two counties have no banks. Demands for loans and discounts are not large. Bank resources are very largely concentrated in the five or six larger towns.

One of the severe handicaps of this region has been poor transportation facilities. There is no through train service anywhere, the region being served by "branch lines." Railroad mileage is small, and trains are few and far between, all being "locals," usually hauling both freight and passengers. Lack of business prevents the building of more railroads, and lack of quick transportation helps to keep the region from developing, especially along lines of perishable truck crops.

Highways have always been poor, due to sparse population and the physical nature of the region. State-built roads have greatly improved transportation facilities. Also many miles of improved roads have recently been built by the counties.

This region has unsurpassed inland waterway possibilities, some of which have been developed. More money is now being spent on opening up inland waterways than at any past time, and more thought is being devoted to the erection of terminal facilities. The Tidewater country is on the verge of finally realizing on her vast water resources.

Conclusions. The future and hope of the Tidewater region appear to lie in the development: (1) of truck crops, as rapidly as markets can be developed to take the surpluses; (2) of the vast forest possibilities; (3) of the unsurpassed fish, oyster, and other seafood resources; (4) of highways and bridges, waterways and docks, and (5) of industries auxiliary to agriculture.

At least two great handicaps will have to be remedied before this area can develop much beyond its present status. First, it will have to be drained, which calls for state and federal aid. Second, it will have to be provided with better transportation facilities. Finally, new vision on the part of the native population is needed to realize the vast undeveloped resources and possibilities of this region of excellent soils, equable climate, and almost unmatched water resources. Nowhere is it easier to make a living, a fact which may largely account for the lack of enterprise that characterizes the area.

The Western Coastal Plain Area

Outstanding Characteristics. The Western Coastal Plain area lies between the fall line and the eastern counties designated as the Tidewater country. This area comprises approximately one-fourth of North Carolina and is a vast region of level and gently rolling land of excellent quality on which will grow in abundance practically every crop suited to the mild climate of eastern North Carolina. There are certain outstanding characteristics that distinguish this area from the other regions of the state.

It is an area of dense agricultural population, having from two to three times as much land under cultivation as the Tidewater region. It is an area of large Negro ratios, and the only area in North Carolina where Negro farmers are increasing faster than white farmers. In fact, no other region of the United States has increased its Negro farmers as rapidly as eastern North Carolina since 1910.

The Western Coastal Plain is the outstanding farm wealth producing section of the state. At least one-half of all the crop wealth of the state is produced here, while for its area it probably ranks first in the United States in the value of crop wealth produced annually. There are two great cash crops of about equal importance—tobacco and cotton—in the combined production of which the area stands first in the United States. In tobacco alone it leads the world, and for its size it is one of the leading cotton producing regions. Almost the entire population lives directly or indirectly by agriculture. Those who are not directly engaged in farming are supplying services to the farmers, either in selling goods to them or in buying and marketing products raised by them.

The Western Coastal Plain is an area of excessive farm tenancy, white and black. Approximately 68 per cent of all farms are operated by tenants, the great bulk of whom own little or no property of any sort. Not only is it an area of excessive farm tenancy, but farm tenancy is rapidly increasing. It is safe to say that no other region in America has increased its farm tenants as rapidly since 1910 as eastern North Carolina. This is the direct result of the region's fitness for the two most attractive tenant crops.

And tenancy in turn makes it an area of high illiteracy and near-illiteracy ratios. The combination cotton-tobacco belt centering around Wilson County, the area of highest tenant ratios, leads eastern North Carolina in illiteracy, white and Negro, separately or together.

Tenancy likewise makes it an area of excessive non-church membership ratios. The tenants move too often to become attached to church rolls or to form connection with any local social institutions or agencies.

The towns of this region are brisk trade and banking centers. Being located in the nation's outstanding non-food cash crop farm region, the towns do a large volume of buying from and selling to farmers. The cream of the wealth produced in this area is skimmed off by the town traders and bankers. The towns are unusually attractive looking and give evidence of the profits to be made by catering to the demands created by this unique farm region.

The Western Coastal Plain region is sadly deficient in livestock. On a per farm basis this region ranks last in the United States in meat and milk animals. Census data show that livestock has grown less and less important in the system of farming. As a rule the tenants have little or no livestock. Seldom do they possess a milk cow. Indeed, in milk cows per farm this region ranks poorest in the United States, and in many counties not more than 20 per cent of the farmers have a milk cow.

This region leads the United States in the use of commercial fertilizer. The bulk of it is used in the production of cotton and tobacco.

Economic Foundations. The economic foundations of this region have been indicated in connection with the discussion of outstanding characteristics. As has been stated, the chief activity is agriculture, with cotton and tobacco as the great money crops. The third crop, corn, is incidental to cotton and tobacco production and is seldom grown for sale. A great variety of other crops is grown, but the total value is small compared with the value of the three leading crops. The chief minor crops are peanuts, sweet potatoes, Irish potatoes, soy beans, and cow peas; peaches, strawberries, dewberries, melons, and other truck and fruit crops.

Perhaps the second largest group lives by trading. The cash income of this region from cotton and tobacco alone is around $150,000,000 annually, which is the basis of a large volume of trade. The supply-merchant and fertilizer businesses run into enormous volumes. Business is especially brisk during the fall months when practically the entire farm cash income is received. Lumbering is perhaps the third source of income, although it is not as important as it has been in the past.

This region ranks second to the Piedmont area in banking. The bank loans and discounts are mainly of a seasonal nature.

There is considerable manufacture, although the volume is small compared with that of the Piedmont. Manufacture is much more important here than in either of the extreme regions of the state. The chief industries are textile mills, cotton-oil mills, sawmills, and woodworking concerns, brick manufacture, and many small industries of little importance.

The transportation resources are excellent, both railway and highway, although slightly inferior to those of the Piedmont. Highways, especially sand-clay and gravel roads, can be built more cheaply than elsewhere in the state. The railway and highway transportation facilities are fully adequate to the needs of the region.

Possibilities and Needs. It is probable that the Coastal Plain region will always be the chief agricultural region of the state, on the basis of value of farm products. Nature designed this region for farming. There are, however, excellent industrial opportunities, and industry is growing. The chief opportunities appear to be the manufacture of cotton goods; the operation of oil mills consuming cotton-seed and soy beans; the establishment of lumber mills and woodworking plants; and the development of industries related to agriculture—canning and preserving. There is an abundance of raw products, cheap labor, and available power, and with the admirable transportation resources and large and developing local and near-by markets, there is reason to believe in the economic possibilities of the area.

The outstanding deficiency and need of the region is, first and foremost, farm ownership. This is fundamental. For since farm tenancy has so largely influenced conditions here, there can be little hope for improvement in the face of an enormous increase in this sort of land exploitation.

Diversified agriculture is urged by everyone, yet the trend is in the opposite direction. It could not be otherwise in view of the growth of farm tenancy. Diversification does not imply less attention to cotton and tobacco but more attention to food and feed crops and to meat and milk animals needed by the farm population. In other words, the region would more likely prosper if its splendid cash crops were produced on more nearly a live-at-home basis.

There is unquestionably a great need for more meat and milk livestock. This is essential from the point of view of health as well as wealth. The high infant death rate would be materially lowered if milk were available, and general health conditions would be improved with a better balanced diet.

A better and cheaper system of farm credits is also needed to supplant the present crude and costly supply-merchant system, but the current method seems inevitable as long as we maintain our existing agricultural program. The chief road to freedom lies in live-at-home farming, but this is of course blocked by tenancy and cash crops. The development of credit unions might be a way out, but constantly moving farm tenants do not develop credit unions.

A crying necessity is the development of systems of coöperative marketing, especially to help solve the problem of selling cotton and tobacco. The present system by which all of our tobacco and 93 per cent of our cotton are marketed is crude and costly beyond belief. But here again, the obstacles to coöperative marketing seem almost insurmountable—farm tenancy, a constantly moving population, illiteracy and near-illiteracy, poverty of the masses, and an organized system of private marketing that does not care to give way to coöperative enterprise. These are the things which wrecked the Tri-State Tobacco

Growers' Association, and which have gradually reduced the Cotton Association until it now handles only about 6 or 7 per cent of the cotton crop.

The Piedmont Region

The Piedmont Plateau lies between the fall line and the Blue Ridge.[7] It comprises approximately 45 per cent of the land area of the state.

> In passing into this region from either of the others, a marked change is at once observable in topography, in production, and largely in industrial pursuits. The tumultuous continuity of mountains subsides into gentle undulations, a succession of hills and dales, a variety and charm of landscape, alike different from the high, uplifted mountain elevations and the flat monotony of the plains or levels of the east. Every step brings to view some new charm, some new arrangement of the rounded hills, some new grouping of the tracts of forest which still cover so large a part of the country. The hills, indeed, in their graceful curving outlines, present lines of beauty with which the eye of taste is never satiated.
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> These are attractions which depend upon permanent features of the landscape, and which, though infinitely heightened in their effects by the verdure of spring and summer, are only brought into fuller relief by the nakedness of winter. The variations of surface, though less defined at first, become more marked towards the west, and towards the Blue Ridge the country assumes a bold and even rugged aspect.[8]

The altitude of the Piedmont Plateau along its western margin at the foot of the Blue Ridge is from 1,200 to 1,500 feet above sea level. There are numerous high and precipitous spurs that project eastward and southward from the Blue Ridge. The Piedmont Plateau descends gradually in elevation, the eastern edge averaging about 500 feet above sea level.

The soil of the Piedmont presents a blending of the soils of the eastern and western regions. It is usually deep, with clay and sandy loam predominant. The soil is stiffer and tougher and therefore much more difficult to cultivate than the sandy loams of eastern North Carolina.

The climate does not differ a great deal from that of the Western Coastal Plain. The growing season is somewhat shorter. The mean average temperature ranges from 56 to 59 degrees Fahrenheit.

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[7] The Piedmont Plateau, geographically, terminates at the foot of the Blue Ridge, but is here considered as extending to the top of the mountain range. Economically and socially the eastern side of the Blue Ridge belongs to the Piedmont Plateau.

[8] *North Carolina: The Land of Opportunity,* pp. 19-20.

This region originally contained excellent forest resources, with hardwoods predominating. The present annual cut of lumber is small compared with that of a few decades ago.

One of the great natural resources of this region is its vast amount of water power, much of which has been developed and which accounts chiefly for the vast industrial expansion found here. Without water power North Carolina would be unable to compete favorably as an industrial state. There are other favorable factors, but cheap power is the *sine qua non* of our industrial development.[9]

Outstanding Characteristics. There are certain characteristics peculiar to the Piedmont. First and foremost is the industrial development of the area. It ranks first in the South in every phase of industrial development, such as number of establishments, value of output, wage earners, capital, and so on. It also ranks first in the United States in the textile industry, having recently supplanted Massachusetts. Approximately four-fifths of the 563 establishments (1927) that comprise the textile industry in North Carolina are confined to the Piedmont.[10]

This region has a monopoly of the major phases of the tobacco industry—the manufacture of pipe-smoking tobacco and cigarettes. More than half of the total value of output of the tobacco industry in the United States is contributed by Piedmont North Carolina, now (1929) amounting in its 20 factories to about $450,000,000.[11] The furniture industry, with 143 establishments, is confined almost wholly to the Piedmont region.

In addition to the three major industries, there is a large development of miscellaneous ones. At least four-fifths of the industrial output of the state is contributed by the section.

The Piedmont is the only area of the state that has a large proportion of urban population. Slightly more than half of the population of this region lives within incorporated towns and cities. All of the large cities of the state except two are located here, and they are by far the most rapidly growing places in the state, several of them, on a per cent increase basis, ranking high among the cities of the nation. The white population averages approximately 85 per cent of the total, the Negro being about one-third that of the Coastal Plain counties.

At the same time, the Piedmont is a region of dense agricultural population, with a slightly larger per cent of improved land than in the Western Coastal Plain. The value of output of farm products is not nearly so large as in the region to the east. However, farming is highly diversified, and the average farm family lives as well as or better than that east of the fall line. Home and farm ownership prevails, and live-at-home farming characterizes the region. The rapidly growing towns and cities, widely scattered over the Piedmont, are offering the near-by farmers large local markets for the surplus farm products. With a dense farm population, large white population, high farm ownership, and larger local markets, it is confidently believed that Piedmont agriculture, although it may lag in value of output, will in a decade or two rank first in the state in net income, and that, man for man, Piedmont farmers will be better off than the farmers east of the fall line. The trend is clearly in that direction. The Coastal Plain is headed into tenancy, larger proportion of Negro population, and cash crop farming; the Piedmont into farm ownership, larger white ratios, and diversified farming on a commercial level. In the end the latter will prove more desirable and profitable and will produce a higher rural social order.

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[9] Water power resources are discussed in chap. II.

[10] For the facts, see chapter on Industry.

[11] *Ibid.*

The bulk of the bank resources of the state are confined to the Piedmont counties, and they are increasing more rapidly here than in the other three areas combined.

The Piedmont has a majority of the stores and carries on the greater part of the trading of the state. Chain stores are more largely confined to this area. Trade is more regular throughout the year and from one year to another.

The transportation resources are excellent, both railway and highway. The concentration of industry results in large business for the railroads, and the concentration of motor cars results in greater demand for highways. On a square mile basis the Piedmont has a big lead in hard-surfaced and other improved highways, being surpassed by few regions in the United States.

Possibilities and Needs. The Piedmont area is now the leading textile center of America and has an unrivaled combination of factors conducive to further development. The trend in this industry is toward the manufacture of more and more finished products, and away from major dependence on yarn production. The Piedmont region of the South is the natural home of the textile industry, and Piedmont North Carolina is advantageously located in this region.

It is highly probable that this region will maintain its position of dominance in the manufacture of tobacco. Within recent years its position at the top has been greatly fortified. The furniture industry should maintain a steady development. Our main advantage here is our start, being in on the ground floor, having an established reputation in the manufacture of furniture.

There are excellent possibilities for the establishment of agricultural industries, especially creameries and condenseries. The local city population offers a large ready market for home-produced and home-processed food products. The region needs more and better livestock and livestock industries. The natural resources and available markets call for an agriculture founded on livestock.

Rural social life in the Piedmont region is in sad contrast with urban social life. This is to be expected in a region of excessive urbanization, where much of the leadership as well as the general population has migrated to town. It is probable that the trough of the depression has been reached and that the stage is now set for an upward trend. The rural Piedmont offers the best opportunities for the development of coöperative farm enterprises, organized country communities, or group enterprises. It will be necessary to organize in order to take maximum advantage of the new economic opportunities.

The Piedmont should attempt to preserve a proper balance between rural and urban population ratios. Few regions have better possibilities for a widespread, coördinate rural and urban development. This region need have neither urban nor rural slums.

Industrial development is always accompanied by problems peculiar to the industry, and in North Carolina this is especially so. In the textile industry, for example, the chief local problem is the corporate ownership of the homes of the mill workers. This is a peculiar condition not without possibly grave consequences. The fact that our industry is decentralized is fortunate and is chiefly responsible for the past harmonious relationships between capital and labor. But we may expect labor troubles along with our growth as an industrial state. The second generation of industrial workers will not be as complacent as the first generation has been. However, difficulties can be minimized by profiting from the experiences of older industrial communities. It is possible to have fair capital profits along with healthy, wholesome, and prosperous labor conditions.

The Carolina Highlands

The Carolina Highlands comprise 17 counties lying between the top of the Blue Ridge on the east and the top of the chain of mountains that serves as the boundary line between North Carolina and Tennessee, known as the Smokies. The Appalachian region, which extends from New York to Alabama, culminates in western North Carolina in a series of ranges that reach more than 6,000 feet in altitude, the state having a large monopoly of the high peaks of the Appalachian chain. Kerr, in describing this region, says:

> The western section is a rugged mountainous plateau; it forms a

narrow, irregular, much indented trough, lying between the bifurcating chains of the western and dominant arm of the southern prolongation of the Appalachians—the Smoky Mountains and the Blue Ridge—the former being the western boundary of the state. The length of this plateau from northeast to southwest is more than 200 miles, its breadth 15 to 50 miles, and its area nearly 6,000 square miles. The Smoky chain has a general elevation of from 5,000 to 6,000 feet, rising in many summits to 6,500 feet and upwards, but is broken down by half a dozen deep water gaps or canyons to the level of 2,000 and even 1,200 feet. The Blue Ridge, which constitutes the eastern boundary of the plateau, is a very sinuous and angular and straggling mountain chain, with a general elevation of from 3,000 to 4,000 feet and upwards, a few of its higher summits, about midway the state, reaching nearly 6,000 feet.

These two bounding chains are connected by many north and south cross chains, of equal elevation with themselves, or greater, and separated by deep valleys. On one of these cross chains, called the Black Mountains, is Mitchell's Peak, the highest point east of the Mississippi, its altitude being 6,711 feet (400 feet above Mount Washington in New Hampshire). The cross-valleys or river basins have an altitude of from 2,000 to 3,000 feet, with smaller benches or marginal plateaus of from 3,500 to 4,000 feet. Seen from the east or Atlantic side, the Blue Ridge appears as a steep, ragged, and broken escarpment springing suddenly 2,000 to 3,000 feet above the Piedmont Plateau at its base.[12]

In the Blue Ridge, the Smoky Mountains, and the cross chains are found the following summits which exceed 6,000 feet in elevation:

In the Smoky Mountains—Mount Buckley, 6,599; Clingman's Dome, 6,660; Mount Love, 6,443; Mount Collins, 6,188; Mount Alexander, 6,447; Mount Henry, 6,373; Mount Guyot, 6,636; Tricorne Knob, 6,188; Raven's Knob, 6,230; Thermometer Knob, 6,157; Luftee Knob, 6,232; Cataloochee, 6,159; Roan (High Knob), 6,313; Roan (High Bluff), 6,287; Grassy Ridge (Bald), 6,220; Cold Spring, 6,015.

In the Balsam Mountains—Enos Plott's Balsam, 6,090; Jones' Balsam, 6,224; Rockstand Knob, 6,002; Brother Plott, 6,246; Amos Plott's Balsam, 6,278; Rocky Face, 6,031; Double Spring Mountain, 6,380; Richland Balsam, 6,370; Chimney Peak, 6,234; Spruce Ridge Top, 6,076; Reinhardt Mountain, 6,106; Devil's Courthouse, 6,049; Sam's Knob, 6,001.

In the Black Mountains—Blackstock's Knob, 6,378; Potato Top, 6,393; Black Dome, 6,502; Mount Gibbs, 6,591; Mount Hallback (or Sugarloaf), 6,403; Mount Mitchell, 6,711; Balsam Cone, 6,671; Black Brother, 6,619; Cattail Peak, 6,611; Hairy Bear, 6,681; Deer Mountain, 6,233; Long Ridge (middle point), 6,259; Bowlen's Pyramid, 6,348.

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[12] *The Coastal Plain of North Carolina*, p. 24.

In the Craggy Range—Big Craggy, 6,068.[13]

In all there are 43 peaks above 6,000 feet, 82 peaks between 5,000 and 6,000 feet, while the number between 4,000 and 5,000 feet is unknown.

The general contour of these mountains is gentle, the summits usually presenting smooth rounded outlines, occasionally rising into sharp-pointed peaks. There are few precipitous and rocky slopes. Usually the mountains are covered with deep, rich soil and clothed with massive forests to their tops. The soils of the mountain valleys and coves are noted for their fertility. The mountain sides are susceptible of cultivation, but the steep slopes often prohibit the use of machinery and require much hand labor. A large per cent of the land is in forests and pasture. Counting pasture land as improved land, several mountain counties rank high in per cent of the land area improved.

The climate of the Carolina Highlands differs less from that of the Piedmont region than would be inferred from its higher altitude. The difference is more perceptible in summer than in winter. The rainfall averages much higher than in any other region of the state, especially on the southern exposures of the mountains. An interesting feature of this region, of great economic importance, is the presence of thermal belts—the frost-free areas lying between the valleys and the mountains in the form of broad bands. These belts afford excellent advantages for fruit and truck production.

Due to the heavy rainfall and rough topography, the Carolina Highlands possesses a vast amount of water power, much of which is undeveloped. Much of the stream flow that is developed in the Piedmont is sourced in the mountains.

One of the great resources of this region is its vast forests, chiefly hardwood types. In variety and value of forest trees, this region is said to be unsurpassed in the United States. Because it has been more or less inaccessible, a large part of the original forest growth still stands. The Great Smoky Mountains contain much virgin timber, a large area having been set aside as a national park.

Outstanding Characteristics. In addition to its physical features, there are several interesing facts in connection with this land-locked area. Many of the social and economic characteristics are the products of isolation caused by the great mountain chains that surround these 17 counties. Some of these counties, indeed, have been referred to as the "Lost Provinces" of North Carolina.

The Carolina Highlands is populated by a native white stock. There is probably no other area in the nation that is so nearly 100 per cent in native-born whites. This is especially true outside the Buncombe area. The region was settled chiefly by a class of whites who were anxious to get away from the slave belt and its class distinctions. The present Negro element is negligible.

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[13] *North Carolina: The Land of Opportunity,* p. 16.

The northern half of the mountain country is more densely settled than is usually assumed; the southwestern corner of the state is very sparsely settled. In fact, this latter region is the most thinly populated area in the state and is not increasing in numbers at a very rapid rate. Only four counties gained above the state average from 1910 to 1920. The population is largely concentrated in the broad valleys between the ranges. The urban ratio in the population is smaller than elsewhere in the state. In fact, few regions in the nation are more rural than our mountain counties.

The Carolina Highlands is an area of excessive native white illiteracy and near-illiteracy ratios. Approximately 17 per cent of the adult white population can neither read nor write. Aside from certain parts of Louisiana and New Mexico, this region probably leads the United States in adult white illiteracy.

This region is characterized by strong family ties, formerly evidenced by family feuds which have practically disappeared. There is much cove kinship, due to isolation and consequent restrictions in choosing mates. Blockading, which once was confined to the Carolina Highlands, still persists but is no longer peculiar to this region, being omnipresent in every area. As a result of poverty, isolation, poor roads in the past, and general historic background, the schools and churches are the poorest in the state, the one-teacher school persisting more than elsewhere. As a result of liberal appropriations from the state equalization fund, however, the schools have made remarkable progress within the last decade or so.

Agriculture is almost entirely of the self-sufficing variety. Products grown for sale represent a small per cent of total value of farm products. The only non-food product is a small quantity of tobacco. The cash income per farm (and per inhabitant) is about as small as anywhere in America. This region best illustrates farming as practised before the era of commercialized agriculture. In meat and milk animal units per farm the mountain counties rank first in the state. Farm ownership characterizes this region. Approximately 90 per cent of the farmers own their farms.

Economic Foundations. The outstanding economic foundations of the Carolina Highlands are: farming, lumbering, resorts, and mining. As has been noted, the region is excessively rural. The major income is from extractive industry. The chief farm products are livestock, especially beef cattle, and sheep in the northwestern counties; wheat, corn, buckwheat, oats, rye, sorghum, Irish potatoes, cabbage, hay and forage, and a small quantity of burley tobacco in the Buncombe-Madison area.

Lumbering is a close second to farming in value of products and in population supported. This is one of the outstanding actual and potential forest areas of America. The forest resources are rapidly being depleted, and there is no forest conservation or reforestation policy except on the half million or so acres of federal holdings.

A chief source of cash income is from the tourist trade. No other region in eastern America offers as much from a scenic standpoint. With the network of excellent highways that have been constructed, together with the establishment of the Great Smoky Mountains National Park, this area bids fair to become one of the outstanding resort regions of America.

Mining is a fairly important source of income in local areas. The chief minerals supplied by this region are kaolin, mica, magnetite, and marble. Recently renewed interest has been shown in the mineral deposits of this area.

Little manufacture appears in the Carolina Highlands. There are a few cotton mills, furniture factories, two-score-odd cheese and creamery plants, woolen mills, the Biltmore homespun industries, and numerous family establishments engaged chiefly in manufacturing trinkets and oddities for the tourists. It is here that eighteenth-century family industry is best preserved. A large rayon industry is being established at Asheville.

The railway transportation facilities are the poorest in the state, with only slight hope for improvement. As a result of state construction, the highways have been vastly improved, all counties being penetrated by hard-surfaced highways. The toll gates that recently were common have disappeared. Trade and banking volumes are the smallest in the state, due to excessive ruralism and self-sufficiency.

Possibilities and Needs. The economic resources of this area are largely undeveloped. There are good agricultural possibilities. Farming needs to rise above the level of self-sufficiency into the commercial level. There are excellent livestock possibilities, especially for beef, sheep, and poultry. Eastern Tennessee, with similar natural conditions, has moved into livestock farming on a commercial level. No region is better adapted to the establishment of cheese factories. Creameries should prosper. The marketing of fresh milk is restricted to the one urban center of this region.

Horticulturists of reputation have lauded this area as a natural apple growing region. Due to lack of industry, thrift, and coöperative effort in marketing, millions of bushels of apples rot in western North Carolina while the state imports great quantities of apples from Oregon, Washington, and other distant states. The home apple trade could be captured by our mountain farmers, but it cannot be done on the basis of individual marketing.

This is a natural cabbage and Irish potato producing region. The mountain farmers could and should supply the seed Irish potato demands of the South. Millions could be derived from this business alone. Of course coöperative effort is essential, as recognized in one case at least, the Farmers' Federation, a movement to organize the farmers of the mountain country chiefly for marketing purposes but also to capture the seed potato business.

As a result of abundant water power, pure water supply, certain raw commodities, and cheap labor, there are good industrial opportunities. Furniture factories, cotton, woolen, and rayon mills, woodworking establishments, paper pulp mills, tannic acid plants, and certain agricultural industries such as cheese plants, creameries, fruit and truck canning, and pickling establishments should prosper in this region.

Concerted effort should be made to develop the unsurpassed resort resources of our Carolina Highlands. America is turning more and more to play and recreation. Located midway between the North and the South, with unsurpassed natural beauty, excellent highways, and other attractions, the Carolina Highlands has a good chance to become the chief inland tourist center of America.

Better schools and churches and a concerted effort to reduce the high illiteracy and near-illiteracy rates are badly needed. The excellent work that has been prosecuted in Buncombe County needs to be extended to cover all the mountain counties. Above all, there is need for all agencies that will reduce individualism and localism and promote socialization and coöperation.

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News Letter, vols. I-XV. Since 1914 the *News Letter* has carried approximately 700 tables in which the states and the counties of North Carolina have been ranked in various social and economic matters, and briefly interpreted. A large number of these studies have been made by the author or under his direction. These studies serve as the foundation for this chapter.

The Library files, Department of Rural Social-Economics, University of North Carolina, contain more than 3,000 manuscripts or research studies on various phases of North Carolina, economic and social, prepared by students and members of the department staff since 1914.

CHAPTER VI

NORTH CAROLINA AS AN AGRICULTURAL STATE

North Carolina is primarily an agricultural state, one of the important such states of the nation. With 283,495 farms in 1925 she ranked second among the states in number of farms. Only Texas, with five times her land area, has more farms. Her large number of farms is especially interesting in view of the fact that the state ranks twenty-eighth in size among the states of the Union. This means that North Carolina farms are necessarily small. In fact, counting only improved acres, North Carolina has the smallest farms of any state. This fact must be borne in mind in analyzing North Carolina as an agricultural state. In bulk total comparisons she always ranks well because there are so many farms and such a large farm population. But when comparisons are made on some unit basis, as per farm, the story is quite different.

All data point to the conclusion that North Carolina is going to remain an agricultural state. She is becoming urbanized and industrialized at a rapid pace, but not at the expense of agriculture. This is a rather unique fact, for urban and industrial development elsewhere has generally been accompanied by a declining agriculture. For several years the farm population and number of farms for the nation as a whole have been decreasing. During these same years the farms of North Carolina have increased at a rapid rate. In 1900 there were eight states with more farms than North Carolina; in 1910 there were seven such states; in 1920 there were five; while in 1925, as has been noted, there was only one state with more farms. Between 1910 and 1925 our farms increased 29,757 or 11.7 per cent. Only three states, Texas, California, and Minnesota, showed larger numerical gains in farms. North Carolina is both small and densely settled compared with these three states.

The increase in farms within recent years has been confined very largely to the eastern part of the state, mainly to those counties that grow cotton and tobacco. Between 1910 and 1925 there were 77 counties that increased their farms and 23 that experienced decreases. The 23 suffering losses are almost all Mountain or Tidewater counties. Not a single important tobacco county and only one important cotton county lost farms between 1910 and 1925.

Between 1920 and 1925, 78 counties increased their farms, the five-year increase during a period of agricultural depression being almost as large as the previous ten-year increase during a period of marked prosperity. Seven of the 22 counties losing farms during this period are located in the Tidewater country. The remaining 15 are scattered over the state. Generally they are rural and sparsely settled counties. Not a single county in the state suffered a severe loss of farms during this period. Generally speaking the losses were only nominal. The counties which have suffered most from boll weevil ravages—Columbus, Bladen, Robeson, Scotland, Richmond, and Hoke—make the best showing in farm increases of any solid group of counties in the state. Trucking and diversified farming have made much headway in this area.

Aside from this group, the northeastern Tidewater region, the west central Piedmont counties, and the Mountain region in general lead in new farms during the last five-year census period. None of these groups ranked high in farm increases during the decade preceding 1920.

The wholesome increase in farms in North Carolina since 1920, a period during which agriculture has not been very profitable, is probably due more to our state-wide system of public highways and improved county roads than to any other factor. This is especially true in the remote regions of the state—the Tidewater counties and the Mountain country. Improved roads and the motor car have worked wonders in reducing the loneliness and monotony of country life, in enabling the farmer to get his produce to market, in shortening distances, in making possible the improvement of rural schools through consolidation, and in many other ways. The country regions of North Carolina, with our excellent highways and easy communication, are far more attractive residence and business areas than they were before the day of good highways. The fact that every section of the state shows growth in farms is largly accounted for by the fact that every county in the state is sharing in the highway construction program. To quote from the *Manufacturers Record:*

> Wherever good highways are constructed, prosperity and progress follow as surely as day follows night. Wherever intolerably bad roads exist, whether consisting of bottomless mud holes or equally bottomless sand piles, there stagnation takes place, along with gradual deterioration of the moral and educational condition of the people, and there poverty exists in direct contrast with the prosperity to be found where modern highways are built.

At the present time North Carolina has the second largest farm population of all the states. On the farms of this state live approximately 1,600,000 people. The farm population of North Carolina is greater than the combined farm populations of Rhode Island, Nevada, Delaware, Arizona, Wyoming, New Hampshire, Connecticut, Utah, Vermont, New Jersey, New Mexico, Massachusetts, and Idaho—greater by several thousands.

Still a Frontier State. And yet North Carolina is a frontier state. Although she possesses more farm dwellers than any other state except Texas, only one-fourth of the land area of the state is under cultivation. Three-fourths of the land area of the state is in forests, cutover woodlands, broomsedge, and unused areas. In the Tidewater country alone there is rich wet land which, if drained, could add 50 per cent to the present cultivated area of the state. Less than a third of the western Coastal Plain area is under cultivation; less than a third of the Piedmont country is under the plow; and less than a fourth of the entire Mountain country is tilled, even counting grazing lands. Vast areas in North Carolina contain only a few families to the square mile. Even the most densely populated areas are sparsely settled when compared with many European states.

The large increase in farms in North Carolina is not surprising when it is recalled that three-fourths of the state is still to be brought under the plow; that North Carolina is attractive, since she is the only state possessing two great cash crops of fairly equal importance; that the vast Coastal Plain area, because of its natural resources in the way of soils and seasons, aided by favorable location near the northern consuming public, is rapidly developing as a great truck producing center; that Piedmont Carolina with her rapidly growing industrial cities is offering larger local markets for home-grown foods and other raw materials; that even the Mountain country, after long years of partial eclipse, gives promise of rapid agricultural development; and finally, that the entire state has been covered with a network of modern highways which if laid end to end would reach around the world.

A State of Small Farms. According to the 1925 Census of Agriculture the average North Carolina farm contained 65.6 acres, and farms were smaller in only three states. If only improved land or crop lands are considered, North Carolina farms average smaller than in any other state. In 1920 only Massachusetts had smaller average cultivated acres per farm. Today cultivated acres per farm in North Carolina are smaller than in any other state, smaller by quite a decided margin. The average farmer in 1924 harvested crops from just 19.6 acres of land.

The table on page 92, based on the 1920 Census of Agriculture, shows how 12 southern states compare with 8 midwestern states in acres of improved farm land per person living on farms. The table is derived by dividing the total acreage of improved farm land by the total farm population.

North Carolina cultivates fewer acres per person living on farms than any other state in the Union. In other words, we come nearer approaching the European conditions of hand and knee farming than any other state. It is necessary to farm intensively in Europe because of dense population. But in North Carolina 25,000,000 acres, or more than three-fourths of the land area of the state, are uncultivated, and a large part of this area is practically idle. The net result of our small-scale farming is large per acre yields, but small per worker and per farm yields, and small accumulated farm wealth. North Carolina always ranks near the top in per acre yields, but near the bottom in per worker yields, and it is the latter fact that is most significant. It would be impossible to secure a large per worker yield on the few acres we cultivate. It is the per worker, not the per acre, income that determines the standard of living of our farm people.

Midwestern States	Improved Acres Per Farm Dweller	Southern States	Improved Acres Per Farm Dweller
North Dakota	62.1	Texas	31.7
South Dakota	50.2	Virginia	8.9
Kansas	41.5	Tennessee	8.7
Nebraska	37.8	Florida	8.1
Iowa	29.0	Arkansas	8.0
Illinois	24.8	Georgia	7.7
Minnesota	23.9	Alabama	7.4
Wisconsin	13.5	Mississippi	7.3
		Louisiana	7.1
		Oklahoma	7.0
		South Carolina	5.7
		North Carolina	5.5

The small size of our farms is due to the type of agriculture we practise. Cotton and tobacco are crops that require a great deal of labor, but not much land or capital. The majority of our farmers are primarily cotton or tobacco farmers. Outside the cotton and tobacco belts farms are also small, either because of the nature of crops grown, such as truck crops, or because of physical conditions of the land, as in the western part of the state, where not a great deal of the land is suitable for cultivation.

The largest average size farms are in the northwestern Mountain counties, where livestock farming prevails. Livestock, grains, hay, and forage call for large amounts of land. The smallest farms in the state, and by far the smallest in the United States, are in the combination cotton-tobacco belt in the east north central part of the state, centering around Wilson and Edgecombe counties. The crops of this region call for a maximum expenditure of human labor and a minimum use of land and capital. It is this region that has led North Carolina and probably has led the United States in farm increases during the last quarter century. More farms in this area have not meant more land under cultivation. The original cultivated area has been divided and subdivided into more and smaller farms. This point is illustrated by the fact that the total amount of land cultivated by approximately 56,000 farmers in 1850 was almost exactly the area cultivated by 283,495 farmers in 1925, approximately 5,500,000 acres in each instance. The increase of farms has been almost entirely an increase of tenant farms. As the tenant population presses on the land supply, the land is divided into smaller tenant farms. It is this same combination cotton-tobacco region that has led the United States in increase in farm tenancy since 1910.

Farms Operated by Negroes. Few are familiar with the degree to which North Carolina farms are operated by Negroes, or the rapidity with which our Negro farmers have increased within recent years.

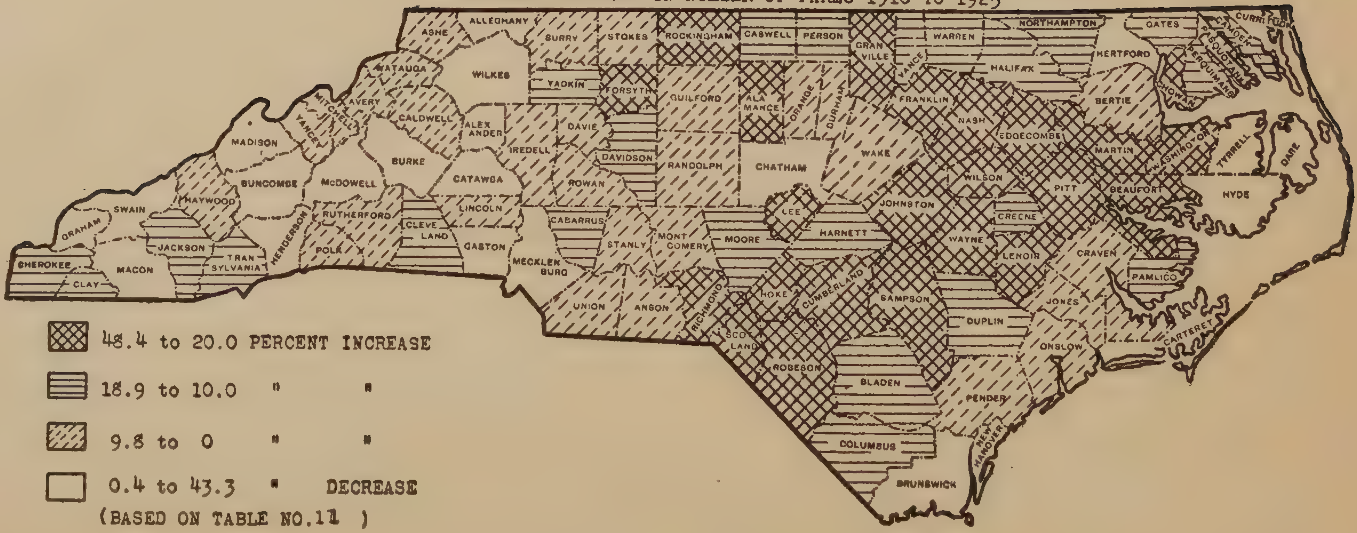
In 1925 there were 80,966 farms in the state operated by Negroes. While we rank fifth in Negro farmers, there is really only one state, Mississippi, that has a much larger number than North Carolina. We are close behind Georgia, Alabama, South Carolina, and Texas, and if the 1910-1925 trend has continued we have moved ahead of these last four states. In 1925 there were 11 counties with more Negro than white farmers, and 28 counties each of which had more than 1,000 farms operated by Negroes.

During the 1910-25 period North Carolina, with a net gain of 15,310 farms operated by Negroes, had the largest increase of Negro farmers of any state. The second largest increase was in Texas. Georgia, Alabama, Mississippi, and South Carolina experienced large losses of Negro farmers, due to the ravages of the boll weevil. Many of these Negroes moved to North Carolina, which has not been hard hit by the boll weevil, and which has a second crop attractive to Negroes and suited to tenancy—tobacco. The table on page 96 shows the number of farms operated by Negroes and the fifteen-year changes for those states having a large number of Negro farmers.

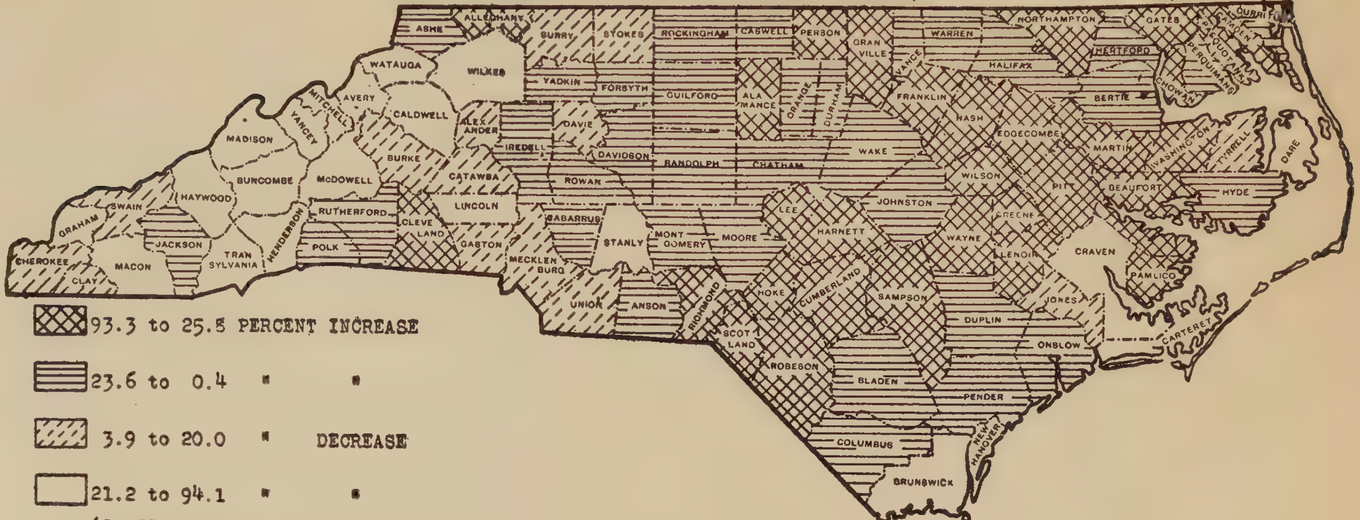
Between 1910 and 1925, 35 counties in the state lost Negro farmers, while 65 gained, the net gain, as has been stated, being 15,310. The 35 counties experiencing decreases are 18 Mountain counties, 7 Tidewater counties, and 10 others in the western half of the state. These 35 counties had a loss of 2,061 Negro farmers. The 65 counties in which Negro farms increased had an increase of 17,371 Negro farmers. The 65 counties experiencing increases almost without exception grow either cotton or tobacco, or both crops. The largest numerical increases were in Nash with a gain of 1,169, Pitt 1,143, and Edgecombe 826 Negro farmers. These are three adjoining counties in the very heart of the combination cotton-tobacco belt. The largest per cent gain was in Washington with 93.3 per cent. The largest per cent decrease was

NORTH CAROLINA

PERCENT INCREASE IN NUMBER OF FARMS 1910 TO 1925


▩ 48.4 to 20.0 PERCENT INCREASE
▤ 18.9 to 10.0 " "
▨ 9.8 to 0 " "
☐ 0.4 to 43.3 " DECREASE
(BASED ON TABLE NO.11)
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
VANCE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
NASH
BERTIE
MITCHELL
AVERY
CALDWELL
ALEX ANDER
DAVIE
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
BURKE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
JOHNSTON
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
CLEVE LAND
LINCOLN
CABARRUS
LEE
GREENE
HARNETT
MOORE
WAYNE
LENOIR
CRAVEN
JACKSON
HENDERSON
POLK
GASTON
STANLY
MONT GOMERY
CHEROKEE
MACON
TRAN SYLVANIA
CLAY
MECKLEN BURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
PAMLICO
CARTERET
ONSLOW
SCOT LAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

PERCENT INCREASE OR DECREASE IN NUMBER OF FARMS OPERATED BY NEGROES 1910 TO 1925


▩ 93.3 to 25.5 PERCENT INCREASE
▤ 23.6 to 0.4 " "
▨ 3.9 to 20.0 " DECREASE
☐ 21.2 to 94.1 " "
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
WARREN
NORTHAMPTON
GATES
CAMDEN
CURRITUCK
PASQUOTANK
PERQUIMANS
HERTFORD
CHOWAN
HALIFAX
VANCE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
BERTIE
MITCHELL
AVERY
CALDWELL
ALEXANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
BURKE
CATAWBA
ROWAN
BUNCOMBE
McDOWELL
WILSON
PITT
BEAUFORT
HYDE
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
LINCOLN
CLEVELAND
JOHNSTON
LEE
HARNETT
GREENE
JACKSON
POLK
CABARRUS
STANLY
MONTGOMERY
MOORE
WAYNE
LENOIR
CRAVEN
CHEROKEE
MACON
CLAY
TRANSYLVANIA
HENDERSON
GASTON
MECKLENBURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
JONES
PAMLICO
SCOTLAND
ROBESON
DUPLIN
ONSLOW
CARTERET
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

(BASED ON TABLE NO. 13)

in Graham with 94.1.

During this fifteen-year period, for the entire state, the farms operated by whites increased from 188,069 to 202,516, an increase of 7.6 per cent. The farms operated by Negroes increased from 65,656 to 80,966, or an increase of 23.3 per cent. In other words, the rate of increase of Negro farmers was slightly more than three times the rate of increase of white farmers. The farms operated by Negroes in 1925 were 28.5 per cent of all farms in the state, the ratio having risen from 25.8 per cent in 1910.

State	Number of Negro Farmers		Net Increase
	1910	1925	1910-1925
North Carolina	65,656	80,966	15,310
Texas	69,918	81,726	11,808
Louisiana	54,879	59,513	4,634
Virginia	48,114	50,147	2,033
			Net Decrease 1910-1925
Arkansas	63,593	63,283	310
Oklahoma	20,671	20,048	623
Kentucky	11,730	10,717	1,023
Florida	14,721	12,012	2,709
Tennessee	38,308	34,647	3,661
South Carolina	96,798	90,581	6,217
Mississippi	164,737	150,142	14,595
Alabama	110,443	85,321	25,122
Georgia	122,559	84,077	38,482

The Negro farmers who own their farms are 27.3 per cent of all Negro farmers. The ownership ratios are highest in the western part of the state and lowest in the combination cotton-tobacco belt. In other words, Negro farm tenancy and Negro population density and ratios are highly correlated. The larger the Negro ratio the higher the rate of Negro tenancy.

If tables ranking the counties according to increase or decrease of farms, farm tenants, and Negro farmers are compared, it will be found that the counties fall very much in the same order. To illustrate, Sampson ranks eighth in increase of farms, ninth in increase of farm tenants, and ninth in increase of Negro farmers. Henderson ranks 95th, 100th, and 97th respectively. Practically every county that lost farms also lost farm tenants and Negro farmers. The degree to which the counties trail along in the same order is almost uncanny, unless one notes the rôle played by cotton and tobacco. A table ranking the counties according to the relative importance of cotton and tobacco in the scheme of agriculture shows that the counties fall in about the same order as in these three items. The combination cotton-tobacco belt leads in increase of farms, tenants, and Negro farmers. About one-third of our counties grow little or no cotton or tobacco, and these are the counties that lost farms, tenants, and Negro farmers.

PRODUCTION OF AGRICULTURAL WEALTH

It is not the primary purpose of this chapter to outline in detail the sources of agricultural wealth produced in the state. The main object here is to analyze North Carolina as an agricultural state, and not to analyze agriculture itself. It seems necessary, however, to give a brief account of the sources of agricultural income.

Crops. North Carolina is primarily a crop state. In average years a larger per cent of our total farm income is from crops than is that of any other state, and in all years North Carolina stands first in per cent of total farm income contributed by non-food cash crops. In other words, livestock plays relatively a smaller part in our system of agriculture than in any other state.[1] Other states that rank near us in this respect are Florida, Mississippi, and Louisiana, states far less suited to livestock production.

Crops and agriculture in North Carolina are synonymous terms. When one mentions agriculture the reaction is to think of crops, so that when it is reported that North Carolina ranks fifth or seventh in the value of *crops* produced, the claim is immediately made that we rank fifth or seventh in the production of *agricultural* wealth.[2] It is hard to convince a person in North Carolina, especially in the eastern part of the state, that there are many states whose animal products are in excess of their gross crop values produced annually.[3]

Ordinarily North Carolina ranks from fifth to seventh in total value of crops produced annually. But if crops and animal products are combined, North Carolina usually ranks between fifteenth and twentieth in total production! It must be remembered that only one state has more farms. Such a large farm population specializing on crops naturally produces a large volume of crop wealth. In 1927 there were six states whose crop totals surpassed ours, and in 1926 there were five such states. The leading crop states in 1927 were:

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[1] This statement can be checked by referring to various issues of *Crops and Markets* published by the U. S. Department of Agriculture showing gross value of farm products.

[2] The State Department of Agriculture itself often makes this mistake.

[3] There were 13 such states in 1926. See *Crops and Markets,* vol. IV, no 7, p. 251.

States	Value of Crops
Texas	$729,754,000
Iowa	501,725,000
California	435,213,000
Illinois	385,052,000
Nebraska	378,819,000
Kansas	362,589,000
North Carolina	361,605,000

The great bulk of our crop wealth comes from cotton, tobacco, and corn. Corn is more or less incidental to cotton-tobacco farming in that corn is grown chiefly to feed mules, horses, and humans employed in growing cotton and tobacco; or to feed hogs, the chief type of meat consumed by cotton and tobacco farmers. This does not mean that North Carolina does not grow a variety of farm crops. As a matter of fact very few states grow a larger variety of crops. But except for cotton, tobacco, and corn, it is more variety than volume, although we rank high as a producer of certain minor crops. The following table gives the leading crops of the state for 1927, ranked in order of importance. This table clearly shows the overwhelming dominance of cotton, tobacco, and corn. The first column indicates how North Carolina ranks in the production of the particular crop.

Rank	Crop	1927 Value
1	Tobacco	$106,850,000
7	Cotton and seed	97,082,000
15	Corn	48,800,000
28	Hay	14,462,000
10	Irish potatoes	11,052,000
1	Peanuts	9,745,000
2	Sweet potatoes	8,117,000
24	Wheat	7,494,000
1	Soy beans	4,692,000
22	Oats	4,128,000
4	Cow peas	3,612,000
7	Strawberries	2,265,000
7	Peaches	2,210,000
9	Rye	1,523,000

Cotton. Cotton has been one of the principal crops of the state from its earliest history. Some cotton is grown in almost every county in the state. As the state lies in the northern limit of the cotton belt, only about one-third of its area is suitable for the production of cotton on a profitable basis. This area includes the western half of the Coastal Plain and the southern Piedmont region. The 1925 Census of Agriculture reported that 175,737 farmers grew some cotton in 1924.

Since the Civil War the area devoted to cotton raising has increased from 386,000 acres in 1866 to 2,023,000 acres in 1926. The total yield varies with the weather and prices but averages around 900,000 bales annually. Our largest crop, 1,250,000 bales, was produced in 1926. On four occasions the crop has been in excess of 1,000,000 bales.

In yield of cotton per acre North Carolina almost always ranks first among the states, the average yield being around 265 pounds of lint per acre. The lowest yield recorded during the last quarter century, 196 pounds of lint, is higher than the average for the United States for any year since 1915. The quality of the lint is about average, the majority of the crop grading around one inch or less.

The high per acre yield is due to several factors, such as small farms well cultivated, the liberal use of fertilizers,[4] and relative freedom from the ravages of the boll weevil.

Although the total production tends to increase slightly, there are many who believe that North Carolina will not be able to compete favorably with the new cotton territory being opened up in the far South, notably in Texas, Oklahoma, and Arkansas. Government studies show that the cost of production in this newly developing belt is far below the cost in the old upper belt. Hope for North Carolina seems to lie in more attention to cotton of a high quality with a staple length of an inch to an inch and a sixteenth. Much of the cotton now grown in the state is of too short staple for local consumption. We should attempt to supply the type of cotton demanded by our own textile mills.

Tobacco. The cultivation of tobacco in North Carolina began with the earliest pioneers. It was first grown on the river lands of the coast country, later in the northern Piedmont region, now known as the Old Tobacco Belt, and is now grown chiefly in the east north central part of the state centering around Wilson and adjoining counties. However, much tobacco is grown in other parts of the state, notably in the southeastern counties along the South Carolina border. The 1925 Census of Agriculture reported that 94,274 farmers grew some tobacco in 1924. The number was much larger in 1928.

The crop has made remarkable expansion within the last few years. In 1860 the production was around 30,000,000 pounds. Twenty years ago the production was around 100,000,000 pounds annually. The production for 1927 was 486,000,000 pounds, and about the same amount was raised in 1928. During the last two years North Carolina has grown nearly 40 per cent of all the tobacco grown in the United States. We produce almost exclusively bright-leaf flue-cured tobacco used in the manufacture of cigarettes and for pipe smoking. The area devoted

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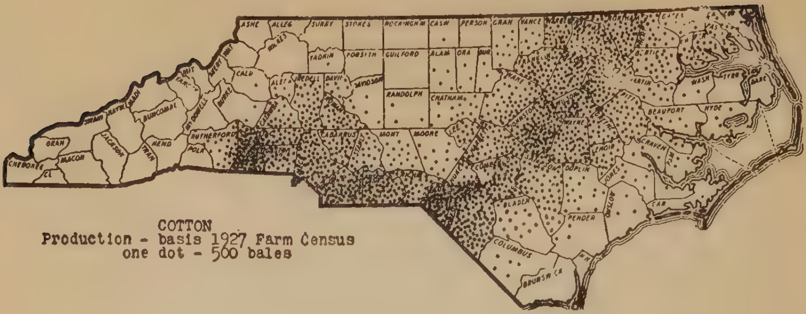
[4] North Carolina uses more commercial fertilizer than any other state.

WHERE PRINCIPAL CROPS ARE PRODUCED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IREDELL
DAVIE
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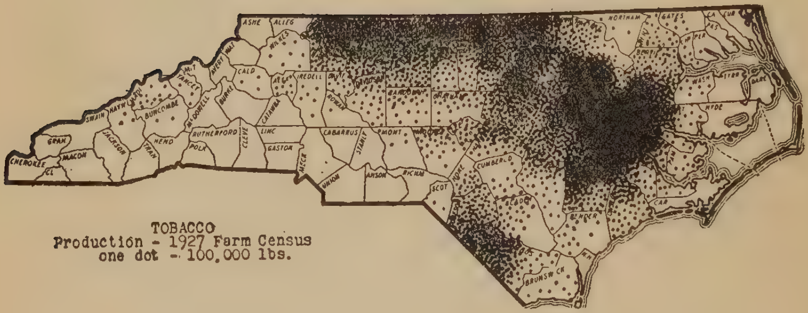
CRAVEN
DUPLIN
JONES
ONSLOW
PENDER
BLADEN
COLUMBUS
BRUNSWICK
NH
CAR
CUMB
JOHNSTON

COTTON
Production - basis 1927 Farm Census
one dot - 500 bales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STANLY
MONT
UNION
ANSON
RICHM
SCOT
CUMBERLD
BLADEN
PENDER
CAR
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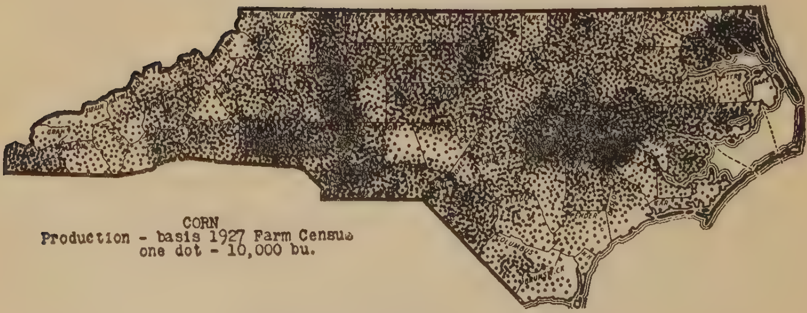
BRUNSWCK
WASH
TYRR
DARE
HYDE

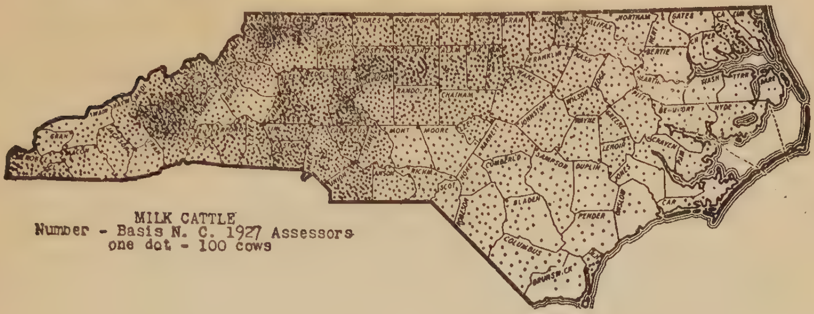
TOBACCO
Production - 1927 Farm Census
one dot - 100,000 lbs.


ALLEG
SWAIN
HAYW
GRAH
WASH
TYRR
COLUMBUS
BRUNSWCK

CORN
Production - basis 1927 Farm Census
one dot - 10,000 bu.

[From *Farm Forecaster,* May, 1928]

WHERE PRINCIPAL TYPES OF LIVESTOCK ARE PRODUCED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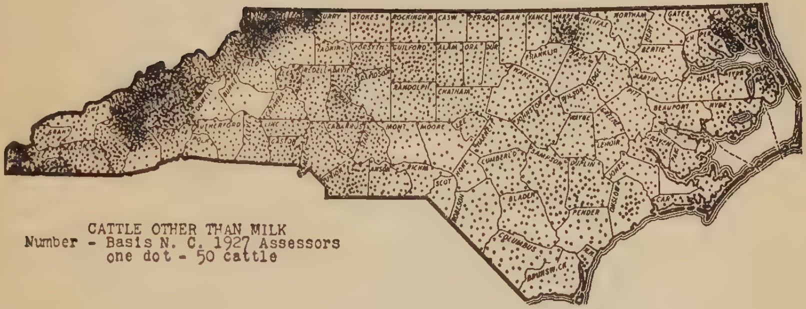
CUMBERLD
SAMPSON
DUPLIN
ONSLOW
CAR
PENDER
BLADEN
ROBESON
COLUMBUS
BRUNSWICK
SWAIN
GRAH

MILK CATTLE
Number - Basis N. C. 1927 Assessors
one dot - 100 cows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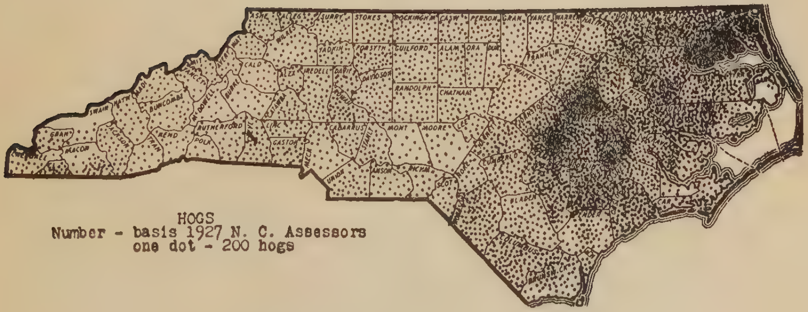
CUMBERLD
SAMPSON
DUPLIN
JONES
CRAVEN
ONSLOW
CAR
PENDER
BLADEN
ROBESON
COLUMBUS
BRUNSWICK
RICHM
ANSON
SCOT
HOKE

CATTLE OTHER THAN MILK
Number - Basis N. C. 1927 Assessors
one dot - 50 cattle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DAVIE
DAVIDSON
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RANDOLPH
CHATHAM
SWAIN
BUNCOMBE
GRAH
MACON
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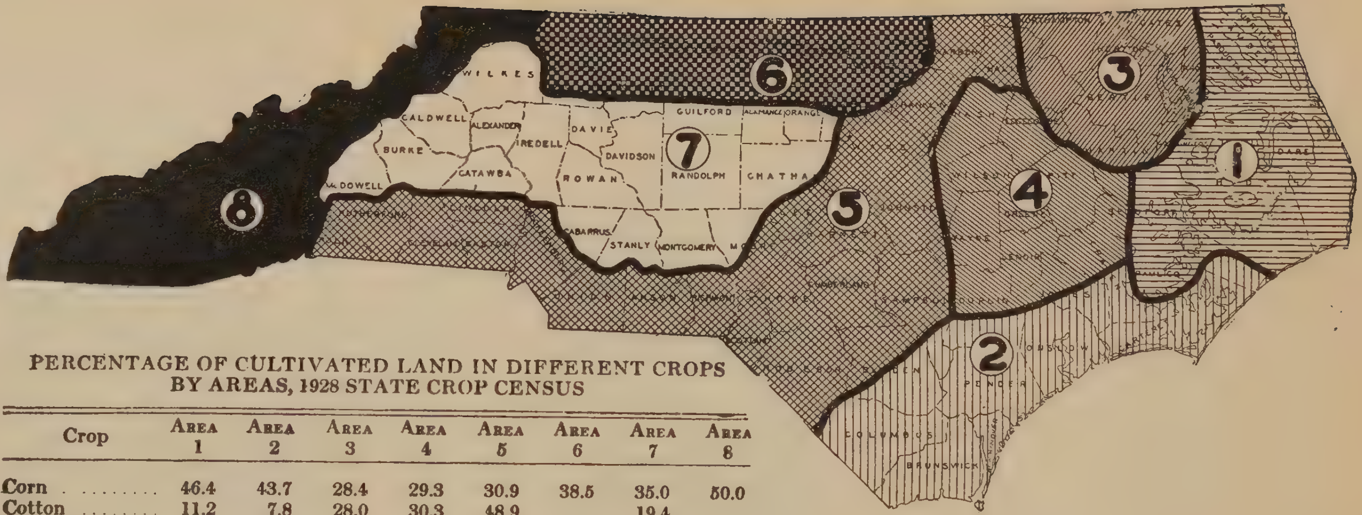
RUTHERFORD
POLK
LINC
GASTON
CABARRUS
MONT
MOORE
MECK
UNION
ANSON
RICHM
SCOT
BLADEN
COLUMBUS
BRUNSWICK

HOGS
Number - basis 1927 N. C. Assessors
one dot - 200 hogs

[From *Farm Forecaster,* May, 1928]


WILKES
CALDWELL
ALEXANDER
BURKE
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DAVIE
DAVIDSON
GUILFORD
ALAMANCE
ORANGE
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ROWAN
McDOWELL
CABARRUS
STANLY
MONTGOMERY
ANSON
RICHMOND
CUMBERLAND
SAMPSON
DUPLIN
WILSON
GREENE
WAYNE
LENOIR
ONSLOW
PENDER
COLUMBUS
BRUNSWICK
DARE
1
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PERCENTAGE OF CULTIVATED LAND IN DIFFERENT CROPS BY AREAS, 1928 STATE CROP CENSUS

Crop	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8
Corn	46.4	43.7	28.4	29.3	30.9	38.5	35.0	50.0
Cotton	11.2	7.8	28.0	30.3	48.9	.	19.4	...
Tobacco	...	14.9	7.4	24.1	6.8	32.0	...	...
Peanuts	...	10.2	33.0	2.8	..	..	...	...
Potatoes	12.2	2.1	..	.	..	..	...	3.6
Sweet Potatoes	2.6	4.5	..	.	...	...	...	...
Grains	...	..	. .	.	6.7	13.8	28.6	16.3
Soy beans	25.9	5.5	..	2.1	3.8*	3.9*	6.4*	3.9*
Cow peas	...	3.1	...	3.5	.	...	...	..
Hay	...	..	...	...	...	..	6.0	22.3
Truck	3.2	6.8	. .	..	...	...	...	3.0
Others	...	1.4	3.2	7.9	2.9	11.8	4.6	.09

* Soy bean and cow peas percentages combined.

[From *Agricultural Program for North Carolina*, Extension Circular 175, 1929.]

to tobacco in 1928 was approximately 730,000 acres, or about one-third the area devoted to cotton.

Corn. The state's third crop, as has been noted, is largely incidental to cotton and tobacco production. Corn is seldom grown for sale, being used almost entirely on the farms where it is produced. The area devoted to corn, approximately 2,300,000 acres, is slightly in excess of the area devoted to cotton, and around three times the area devoted to tobacco. The area devoted to corn production has not increased a great deal since 1866. The total yield has doubled since that date, increasing from slightly less than 22,000,000 bushels in 1866 to slightly less than 43,000,000 bushels in 1928.

Crops other than these three are of secondary importance in so far as they contribute to the volume of agricultural production.[5] All the other crops combined are not so important as either of our leading cash crops. However, certain minor crops are of interest, due chiefly to the position North Carolina occupies in their production. The state leads all others in the production of peanuts and soy beans, ranks second in the production of sweet potatoes, fourth in cow peas, seventh in strawberries and peaches, and tenth in Irish potatoes, at least in 1927. All told, these smaller crops bring in a neat sum of cash, but small when compared with our two great cash crops.

The following table from *Agricultural Graphics*[6] shows the trend of important food and feed crops from 1870 to 1920.

FOOD CROPS AND POPULATION IN NORTH CAROLINA CENSUS YEARS 1870-1920

Year	Population	Bu. Produced in Preceding Year		Bu. Per Inhabitant	
		Corn	Wheat	Corn	Wheat
1870	1,071,361	18,454,000	2,860,000	17.2	2.7
1880	1,399,750	28,020,000	3,397,000	20.0	2.4
1890	1,617,949	25,784,000	4,292,000	15.9	2.7
1900	1,893,810	34,819,000	4,342,000	19.4	2.3
1910	2,206,287	34,064,000	3,827,000	15.4	1.7
1920	2,559,123	40,998,000	4,745,000	16.0	1.9
		Oats	Potatoes (all)	Oats	Potatoes (all)
1870	1,071,361	3,220,000	3,811,000	3.0	3.6
1880	1,399,750	3,838,000	5,299,000	2.7	3.8
1890	1,617,949	4,513,000	6,868,000	2.7	4.2
1900	1,893,810	2,455,000	7,418,000	1.3	3.9
1910	2,206,287	2,783,000	10,865,000	1.3	4.9
1920	2,559,123	1,671,000	12,163,000	.7	4.8

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[5] Anyone interested in a detailed discussion of crops grown in the state will find it in *North Carolina: The Land of Opportunity.*

[6] H. R. Smedes.

Horticulture. The claim is often made, and not without justification, that no state offers a broader or more complete field for the production of fruit and truck crops than North Carolina. The various climatic conditions, ranging from subtropical in the east to almost Canadian conditions in the mountainous sections of the west, together with the great variety of soil types, give North Carolina an interesting and favorable place in fruit and vegetable growing. The high, cool mountain regions are well adapted to growing late vegetables for home and southern markets; while the Coastal Plain section, with its level, mellow, sandy loam, easy of cultivation and retentive of moisture, is adapted to the production of early vegetables for the northern markets. The upper Piedmont and Mountain sections are admirably adapted to the production of fall and winter crops of cabbage, late Irish potatoes, and fall celery.

The production of fruits and vegetables in North Carolina is receiving greater attention now than at any previous time, because of the invasion of the southeastern counties by the boll weevil, the realization of the value of diversification in agricultural prosperity, and the growth of cities within the state affording larger local markets. The value of fruit and vegetable crops raised for shipment in North Carolina is estimated at about $10,000,000 annually.[7] There is practically no limit to the quantity of fruit and truck crops that can be produced in the state. The area capable of growing truck crops advantageously is in excess of the whole area in the United States now devoted to truck crop production. As the near-by and distant city populations increase, our horticultural resources will be developed more extensively.

The fruit crops which seem destined to hold high rank are apples grown in the mountain area, peaches grown in the Sandhills region, and strawberries and dewberries grown mainly in the southeastern part of the state.

A great variety of truck crops can be produced in the state. The ones that lead now and which seem destined to rank at or near the top are Irish potatoes, which grow well over the entire state, the eastern section being well suited to the production of the early crop and the mountain section ideally suited to the production of the late crop; and sweet potatoes, which are grown largely on land suited to cotton production. Other truck crops that thrive well are lettuce, cabbage, onions, watermelons, cantaloupes, cucumbers, beans, beets, asparagus, celery, eggplants, and spinach.[8]

Livestock. As has already been stated, there is probably no other state in which livestock plays relatively as small a part in the system of agriculture as in North Carolina. The relative absence of livestock is not due to lack of natural resources conducive to livestock farming. Our natural resources are far superior to those of many states that beat us hands down in livestock. There are several states that have larger Negro ratios, larger farm tenant ratios, and poorer location with respect to markets for livestock products; yet these states all surpass North Carolina at livestock production. The chief explanation for this condition in North Carolina is the ability of the state to get along on cotton and tobacco. We are slaves to a cash crop type of agriculture, and as long as these crops can be grown safely it appears that we will continue to grow them in ever increasing volume.

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[7] *News Letter* study on Southern Commercial Truck Crops, vol. XIII, no. 19.

[8] An analysis of horticultural possibilities of North Carolina appears in *North Carolina: The Land of Opportunity.*

Livestock Values. According to the 1920 Census, North Carolina ranked next to the bottom in the value of all livestock per farm.[9] Nevada ranked highest with $9,451 in livestock; Alabama came last with $441; while North Carolina ranked forty-seventh with $442. The average farm in the United States has around three times as much livestock as in North Carolina.

The counties of the state ranged from $735 in livestock per farm in Alleghany, a mountain county, to $241 in Dare County. Generally speaking, the per farm value of livestock increases with the elevation in North Carolina, being lowest in the Tidewater country and highest in the Mountain counties. This is especially true if only consumptive, or meat and milk, animals are included.

Livestock Levels. If the states are ranked on the basis of livestock levels, that is, on the basis of animal units per unit of farm land, North Carolina ranks forty-fourth, or did in 1920.[10] A lightly stocked farm state would have one animal unit to every five acres of farm land, an animal unit being one work animal or dairy cow, two other cattle, five hogs, or ten pigs, or 100 head of poultry. On this basis North Carolina is 31 per cent lightly stocked, or about one-third as heavily stocked as an Iowa farm. All of the southern states except Texas are more heavily stocked on this basis of calculation.

The county that makes the best showing[11] in the state is only 62 per cent lightly stocked, while the county ranking last is only 14 per cent lightly stocked. These figures include mules and horses, a fact which largely accounts for whatever standing the cotton and tobacco counties have.

Meat and Milk Animal Units. If only meat and milk animals are considered, it can be clearly shown that on a per farm basis North Carolina ranks lowest of all the states.

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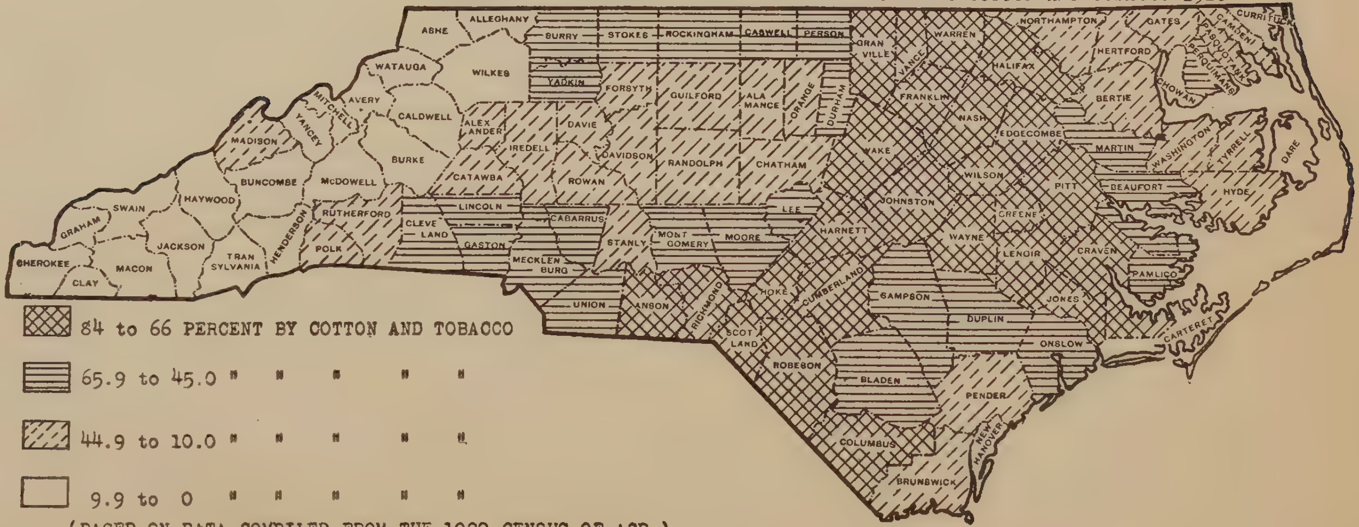
[9] For rank of states see *News Letter,* vol. IX, no. 1.

[10] *Ibid.,* vol. VIII, no. 29.

[11] *Ibid.,* vol. VIII, no. 30.

NORTH CAROLINA

PERCENT OF ALL AGRICULTURAL WEALTH PRODUCED BY COTTON AND TOBACCO 1920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GATES
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CURRITUCK
PASQUOTANK
PERQUIMANS
HERTFORD
CHOWAN
BERTIE
HALIFAX
VANCE
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
HYDE
BEAUFORT
PITT
WILSON
WAKE
DURHAM
ORANGE
ALA MANCE
GUILFORD
FORSYTH
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AVERY
MITCHELL
YANCEY
MADISON
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ALEX ANDER
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DAVIDSON
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MOORE
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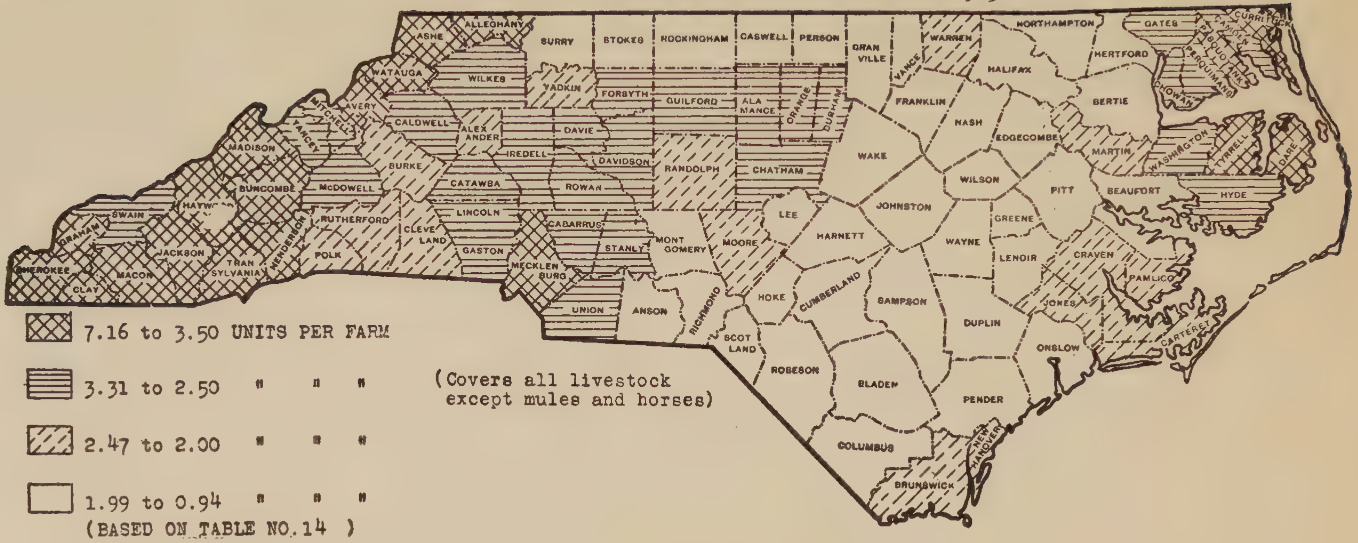
GREENE
LENOIR
CRAVEN
PAMLICO
JONES
CARTERET
ONSLOW
DUPLIN
SAMPSON
CUMBERLAND
HOKE
RICHMOND
ANSON
UNION
SCOT LAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
▩ 84 to 66 PERCENT BY COTTON AND TOBACCO
▤ 65.9 to 45.0 " " " " "
▨ 44.9 to 10.0 " " " " "
☐ 9.9 to 0 " " " " "

(BASED ON DATA COMPILED FROM THE 1920 CENSUS OF AGR.)

MEAT AND MILK ANIMAL UNITS PER FARM YEAR 1925



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CAMDEN
PASQUOTANK
PERQUIMANS
HERTFORD
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GUILFORD
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DURHAM
FRANKLIN
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EDGECOMBE
MARTIN
WASHINGTON
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MITCHELL
AVERY
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SAMPSON
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JONES
UNION
ANSON
RICHMOND
SCOT LAND
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
▩ 7.16 to 3.50 UNITS PER FARM
▤ 3.31 to 2.50 " " "
▨ 2.47 to 2.00 " " "
☐ 1.99 to 0.94 " " "
(BASED ON TABLE NO.14)

(Covers all livestock
except mules and horses)

When the counties are ranked according to meat and milk animal units per farm,[12] as has been done for the year 1925, it is found that Alleghany, a mountain county, stands first with 7.16 meat and milk animal units per farm, and Wilson, the hub of the cotton-tobacco farm-tenant belt, ranks last with .94 meat and milk animal units per farm. The first 11 counties are all west of the Blue Ridge. The last 23 counties are all east of the fall line—in other words, cash-crop tenant counties.

Dairy Cows. According to the 1925 Census of Agriculture North Carolina had 251,211 cows two years old and over classed as dairy cows, or an average of .83 dairy cows per farm. Ranking the states according to dairy cows per farm,[13] Wisconsin stands first with 10.15 dairy cows per farm, and Florida comes last with an average of .74 dairy cows per farm. On this basis North Carolina ranks forty-sixth.

Although Louisiana and Florida rank slightly below North Carolina in cows classed as dairy cattle per farm, both of these states far surpass North Carolina in cows two years old and over classed as beef cattle. While North Carolina had in 1925 only 84,927 beef cows two years old and over, Louisiana had 300,205, and Florida had 318,517. Louisiana has per farm seven times as many cows two years old and over classed as beef as North Carolina has, while Florida has twenty times as many. Since some beef cows are milked, it is very clear that with so many more beef cows both Florida and Louisiana actually rank ahead of North Carolina. In other words, North Carolina actually ranks last of all states in milk cows per farm, and therefore last in milk and butter production per farm.

Counting cows actually being milked, the state will not average anywhere near one cow to the farm. A large per cent of milk cows are concentrated on dairy farms, a dozen here, two dozen there, and so on. The 1920 Census reported 100,000 farms in the state with no dairy cow, and nearly 100,000 farms with no cattle of any description.

For the most part dairy cows are confined to the western half of the state. The eastern half of the state, the cotton and tobacco belt, with large tenant and Negro population ratios, has the barest minimum of milk cows. Edgecombe, a great crop county with nearly 4,000 farms, reports only 1,263 dairy cows. Scotland County with 2,210 farms reports 574. Wilson County with 4,616 farms reports only 983. Pitt County averages less than one to every five farms. And so on throughout the Coastal Plain area. Probably four-fifths of all farm families in this great crop-producing belt hardly know the taste of milk and butter. There can hardly be another farm area in America that makes anything like as poor a showing in dairy cattle per farm as the cotton-tobacco belt of North Carolina. All of the southern states, most of them with larger Negro and farm tenant ratios, make a better showing in dairy cows than North Carolina. Our Coastal Plain counties, which bring up the rear in North Carolina, make a miserable showing in this respect—which, incidentally, goes far towards accounting for the very high infant mortality rates of these counties.

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[12] *Ibid.*, vol. XIII, no. 26.

[13] *Ibid.*, vol. XII, no. 22.

Seventy counties in the state reported fewer dairy cows in 1925 than they reported in 1920. New Hanover, a city county, reported a five-year increase in dairy cows of 92.2 per cent. Hertford, a northeastern county, reported a decrease of 96.5 per cent in dairy cows.[14] Her 2,212 farms contained only 61 dairy cows, which will not miss much of being a low record for the United States!

All Cattle. If the states are ranked according to total cattle of all kinds per farm, North Carolina ranks last of all the states, according to the 1925 Census of Agriculture. That Census reported 544,512 head of cattle in the state, or an average of 1.9 cattle per farm. The southern states foot the column, and North Carolina ranks last among the southern states. The average farm in the United States contained 9.66 cattle, or approximately five times as many cattle as the average farm in North Carolina.

According to this same Census, 87 counties in the state decreased in cattle between 1920 and 1925.[15] This was due in part to the fact that the 1925 Census was taken in January, but it is also an indication of a true trend away from cattle, especially beef cattle.

FOOD ANIMALS PER INHABITANT IN NORTH CAROLINA 1870-1925*

Year	Population	Number Animals			Per Inhabitant		
		Milk Cows	Other Cattle	Swine	Milk Cows	Other Cattle	Swine
1870	1,071,361	197,000	324,000	1,075,000	.18	.30	1.00
1880	1,399,750	232,000	425,000	1,454,000	.17	.30	1.04
1890	1,617,949	223,000	407,000	1,251,000	.14	.25	.77
1900	1,893,810	233,000	391,000	1,300,000	.12	.21	.69
1910	2,206,287	309,000	392,000	1,228,000	.14	.18	.56
1920	2,559,123	354,000	291,000	1,271,000	.14	.11	.56
1925	2,800,000	297,000	242,000	872,000	.11	.09	.31

* Compiled by H. R. Smedes.

Quality of Livestock. Enough has been said to prove conclusively that in quantity and value, North Carolina ranks near, if not right at, the bottom as a livestock state. The only available indication as to the quality of our livestock is certain information reported by the 1920 Census of Agriculture on the number of farms in each state reporting pure-bred livestock. From this information it is discovered that only 3.9 per cent of North Carolina farms reported pure-bred livestock of any description, and only two states ranked below us in this respect.[16] Thus in quality of livestock we rank near the bottom, just as we rank in quantity. There are a few fine dairy herds in the state, but the cows that are blue-blooded are far outnumbered by the cows that give blue milk.

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[14] *Ibid.*, vol. XII, no. 15.

[15] *Ibid.*, vol. XII, no. 20.

Our state does not produce one-sixth of the beef we need, assuming that we require as much as the average person in the United States actually did consume in 1925, which was 63.1 pounds. Nor do we produce in the state one-third of the milk or butter that we need, assuming that we must have as much as the average person in the United States actually did consume in 1925. North Carolina does not import the entire deficit. We simply do without much of the beef, milk, and butter we require, which is worse than if we imported that deficit.

It seems clearly demonstrated that North Carolina is predominantly an agricultural state and that crops stand first and foremost in our system of farming. It is generally accepted that "the steps up in an agricultural civilization are, first and bottom-most, single crop farming, no matter whether it be wheat, or corn, or cotton, or tobacco; second, livestock farming based on home-raised food and feed crops; third, farm industries based on crops or livestock or both, in which the farmers themselves put their own farm products into finished form for final consumption; and fourth, coöperative farm enterprise based on all these lower forms of agriculture."[17]

North Carolina best illustrates the first stage; Denmark and California best illustrate the final stage. "Assuredly cotton and tobacco farming, based on farm tenancy, imported food and feed supplies, and time-merchant credit, is the lowest rung of the farm ladder."[18]

North Carolina may be growing slightly more food crops and probably is producing more milk and butter year by year, but we are also growing more cotton and tobacco, especially tobacco, so that relatively food and feed crops have not gained in importance. At least as large a per cent of our agricultural production comes from non-food cash crops as ever in our history. It is true that we grow a great variety of food and feed crops, but the volume still remains low, too low for health and safety.

Food and Feed Deficit

As a result of our excessive attention to non-food cash crops North Carolina fails to produce the food and feed needed for consumption in the state. According to every writer who has ever expressed himself,

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[16] *Ibid.*, vol. VIII, no. 32.

[17] E. C. Branson.

[18] *Ibid.*

North Carolina has all the physical conditions conducive to the production of food and feed crops and to livestock farming. In view of the fact that the state has the second largest farm population, and that 55 per cent of our population live on farms, it would seem that the state should be at least self-feeding. But she is not. This subject has been worked at from every known angle by the Department of Rural Social-Economics of the University of North Carolina. Its findings have been approved by officials both of our State Department of Agriculture and of the United States Department of Agriculture. According to estimates based on approved conservative calculations,[19] our bill for imported food and feed supplies in 1920 was $235,000,000. The bill in 1929 is around $170,000,000, due to the increased purchasing power of the dollar since 1920. The volume of produce imported is probably larger than in 1920.

The following table[20] shows the calculations for the state as a whole for the year 1920:

FOOD AND FEED NEEDED

For 2,560,000 people @ $155	$396,800,000
468,000 work-animals @ $78	36,504,000
498,000 dairy cows @ $37	18,426,000
199,000 other cattle @ $16	3,184,000
92,000 sheep @ $3	276,000
1,362,000 swine @ $13	17,706,000
117,000 animal units of poultry @ $78	9,126,000
Total	$482,022,000

FOOD AND FEED PRODUCED

Food and feed crops	$172,520,000
Dairy products, not consumed on farms	14,912,000
Poultry products	18,080,000
Honey and wax	356,000
Animals sold and slaughtered, estimated	41,579,000
Total	$247,447,000
Deficit	$234,575,000

When the counties were treated individually it was found that only three counties were self-feeding,[21] and 97 counties failed to produce as much food and feed supplies as they needed to consume. It was calculated that the state averaged 52 per cent self-feeding.

When one stops to consider the enormous quantity of food consumed by our urban population, nearly all of which is imported into the state, not to mention the great amount of imported food and feed supplies purchased by our farm population, the deficit appears conservative.

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[19] For details of method and fact see *News Letter*, vol. VIII, nos. 20, 47, and 49.

[20] *Ibid*, vol. VIII, no. 20.

[21] *Ibid.*, vol. VIII, no. 49.

Anyone who stops to survey the shelves of our grocery stores will see that almost everything offered for sale is from outside the state. A detailed survey of wholesale grocery stores in a Piedmont town[22] showed that of the $69,000 worth of groceries handled by three stores, $67,188 worth came from outside the state. The chief goods handled sourced in North Carolina were sweet potatoes, Irish potatoes, a few apples, and some sauerkraut. Agricultural industries are almost unknown in North Carolina. The home-grown food commodities handled by our wholesale and retail grocery stores are usually unprocessed products, such as sweet potatoes, cabbage, Irish potatoes, homemade butter, and various fruits and vegetables that represent harvest season surpluses. Almost no canned goods of any description are made in North Carolina, and very little in any other southern state.

Farm people should be the best fed of all people. They should and could have a well-balanced diet, with just a little attention to food production. Our farmers would produce surpluses for sale in our towns and cities if only our towns and cities would help to solve the local market problem for home-raised food and feed supplies. Instead, the people of North Carolina spend $170,000,000 a year for imported food and feed supplies. Neglecting home-raised food crops and buying farm supplies of this sort with cotton and tobacco money is a hopeless way of getting rich and getting on and up in the world. We have tried it for 70 years, and we ought to know it by this time. Producing cotton and tobacco on a bread-and-meat basis is now and always has been the only sensible farm system for North Carolina and the South generally.

The table[23] on page 113, based on the 1920 Census of Agriculture shows the number of stockless, foodless farmers in North Carolina and throws further light on our inattention to food and feed production.

The 1925 Census of Agriculture showed no improvement had taken place since 1920. Generally speaking, livestock and food crops seem to have lost ground. Out of 283,482 farms, 111,328 reported no hogs, 224,432 reported no beef cattle, 139,901 reported no dairy cows, 106,475 reported no cows milked, 179,415 grew no hay or forage, 216,107 grew no Irish potatoes, and 193,700 grew no sweet potatoes during the previous year.

FARM WEALTH

It seems fitting to include in this chapter a brief account of the wealth of North Carolina farmers as shown by the last two Censuses of Agriculture.

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[22] Made by a student of the author at Albemarle.

[23] A full discussion of these and related data appears in the *News Letter*, vol. VIII, no. 20.

FARMS LACKING FOOD AND STOCK REQUIREMENTS *

Lacking	Number Farms	Per Cent
Cattle	78,957	29.3
Milk cows	99,559	36.9
Sheep	262,022	97.2
Goats	265,690	98.6
Hogs	47,733	17.7
Gardens	44,197	16.4
Not Growing		
Corn	16,737	6.2
Oats	235,116	87.2
Wheat	180,425	67.0
Hay or forage	134,424	49.8
Irish potatoes	190,694	70.7
Sweet potatoes	132,533	49.1

* Based on total number farms in state, 265,763.

According to the 1925 Census of Agriculture, the farm property of the state was valued at $1,050,015,960, some $200,000,000 less than in 1920. However, bulk totals have little significance. The value of all farm property per farm in 1925 was $3,704, and our rank among the states was forty-first. The seven states ranking below North Carolina are all southern. For the United States the average farm was valued at $8,949. The land and buildings alone were valued at $3,282 per farm in North Carolina, and the state shared fortieth position with Kentucky. In 1920 the average farm in North Carolina was valued at $4,634, and 42 states ranked ahead of ours in this respect. Iowa led with a value of nearly $40,000 per farm.

The 1925 Census does not report the value of buildings separately, but in 1920, according to the Census, the farm buildings of North Carolina were valued at an average of $811 per farm, and our rank was forty-third. Farm implements and machinery in 1920 were valued at $202 per farm, and North Carolina's rank was forty-fourth. In 1925 the value of our farm implements and machinery was reported as being $164 per farm, the decrease being due to an increase in the value of the dollar. Manifestly our farm products are largely handmade, as $164 will not purchase much farm machinery. Only three counties in the state averaged more than $300 worth of implements and machinery per farm in 1920.[24] The mountain counties were almost devoid of farm machinery, averaging less than $60 per farm!

The remaining item included under farm property is livestock. As has already been stated, North Carolina ranked next to the bottom in this particular, the average value of livestock per farm in 1920 being $442.

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[24] *News Letter,* vol. IX, no. 11.

It is thus seen that although North Carolina has a fairly large aggregate amount of farm property, the value per farm is very small compared with other states, and our rank in the several items is consistently low. The low rank of the state in farm property and its subdivisions per farm is due to (1) the small average size of our farms, (2) the large ratio of tenants whose farms are very small and whose homes and other buildings usually are a bare minimum, (3) small investment in barns and storage houses because we are crop farmers, deficient in livestock, grain, hay, and forage, (4) few home comforts and conveniences in farm homes of all classes, and (5) the de-leveling influence of the Negro with his lower standards of living and willingness to be content in homes often barely better than huts, usually characterized as "two rooms and a lean-to."

With regard to homes and home comforts and conveniences, the following table[25] affords a comparison of Iowa and North Carolina:

CONVENIENCE	PER CENT HOMES	
	Owners	Tenants
IOWA		
Power washing machines	76	49
Running water	45	29
Bath tubs	53	25
Indoor toilets	46	29
Gas and electric irons	56	29
Furnace heat	100	54
Telephones	100	92

NORTH CAROLINA	PER CENT OF ALL HOMES IN N. C.
Washing machines	0.6
Running water	0.9
Bath tubs	0.9
Indoor toilets	0.6
Electric and gas light	1.4
Heat other than fireplaces	3.1
Telephones	9.0
Vacuum cleaners	0.0
Kitchen sinks	1.0
Refrigerators	1.9
Rugs	24.6

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[25] *Ibid.*, vol. XII, no. 4. The facts about North Carolina were obtained in a survey of 1,014 farm homes in two townships in each of three counties, namely, Edgecombe, Chatham, and Mitchell. The farm-tenant rate is about the same in both states.

In other words, of the 1,000-odd farm homes surveyed in North Carolina, six had washing machines, nine had running water, nine had bath tubs, six had indoor toilets, ten had kitchen sinks, and so on.

In Iowa 760 out of one thousand would have washing machines, 450 running water, 530 bath tubs, and so on.

Conclusion. No better summary of this chapter could be given than the following quotations from a recent article by the South's outstanding rural social-economist.[26] What he says concerning the South is equally true of North Carolina. It is the distilled essence of economic and social conditions existing in agricultural North Carolina as well as in the rest of the agricultural South:

> *Economic Conditions.* Southern farmers are crop farmers mainly. Generally they are one-crop farmers, producing either cotton or tobacco as a main crop. They are food and feed farmers incidentally or accidentally. The necessity for work-stock feed explains our large acreage in corn. For more than a half century there has been a steady increase of work stock and a steady decrease of milk and meat animals in the South. Cotton and tobacco farmers prevailingly consider it to be good sense and good business to produce cotton and tobacco and to buy farm supplies with cotton and tobacco dollars. As a result we produce vast volumes of cotton and tobacco wealth year by year, but the farm wealth retained is almost negligible; that is to say, wealth remaining in the hands of the farmers themselves. Neither the cotton-tobacco farmer nor the community nor the state seems to be able to hold down at home the large per-acre values of cotton and tobacco wealth produced. When compared with the food and feed farmers of the Middle West, our per acre production of crop values is high, but our per worker production is low—so low as to be startling. Cotton and tobacco money refuses to stick to the palms that sweat it out. The same thing is true of every state and every country on earth where the money income is derived mainly from a single crop. . . . Mainly there are three reasons for this state of affairs in the South:
>
> 1. One-crop farmers are producers of raw wealth, and the producers of raw wealth of any sort are almost inevitably at the bottom of the economic scale. The wealth they produce goes mainly to the transporters, processors, wholesalers, jobbers, retailers, and credit agencies. For many years the cotton-tobacco money current in the South has barely settled our bills for imported food and feed stuffs. . . .
>
> 2. The single money-crop system of farming relies upon a false application of the doctrine of diminishing returns. The farmer is a consumer as well as a producer of values. When the doctrine of comparative advantage is applied to the farmer at the point of consumption,

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[26] Branson, "Planned Colonies of Farm Owners," in *Economic Problems of Reclamation.*

then it is manifestly wise for him to produce his own "hog and hominy, hay and forage," as the phrase goes down South. It is a spare-time, by-products proposition for the cotton or tobacco farmer. He can not hope to be a self-sufficing farmer, but it is an economic necessity for him to be a self-feeding farmer. "The first business of the farm," says Thomas Nixon Carver, "is to feed the farmer, the farm family, and the farm animals."

The farmer must, of course, consider comparative advantage in the production of everything he has to sell, which is something the cotton-tobacco farmer has not yet done; but also he must apply this economic doctrine to the food and feed consumed on his farm. If, as a spare-time proposition, he can produce it for less than he pays for it delivered on his farm, then it is manifestly advantageous to do so. The commercial economist applies the doctrine at the point of production. He is interested in the volumes of wealth produced. The cotton-tobacco farmer must also apply it at the point of consumption, if he is ever to retain any considerable portion of the wealth he produces.

3. A further reason for the economic status of the crop farmers of the South lies in the fact that the per unit cost of production is excessive. It is so because cotton and tobacco involve a maximum of human labor and a minimum of horse and machine power. The average cotton and tobacco farmer of the South consumes his profits in the very act of production, and the pathos of it is that little or nothing is left of his year's income when his bills are settled and the balance sheet is struck. . . . The agriculture of the South needs (1) to rise to the level of meat and milk animals adequate to the needs of our farm populations, and (2) to move as rapidly as possible into processing livestock products, as rapidly as organization will develop nearby and remote markets for such products. The movement needs to be marked by the caution of wisdom. Not even cotton and tobacco farmers can afford to practice diversification any more rapidly than fair prices and profits will reward their efforts.

Social Conditions. But even more important is a consideration of the social conditions under which the South produces farm wealth:

1. The farmers of the South are settled in solitary farmsteads, from three to seven families per square mile, scattered throughout our vast open spaces—barely more than one family per square mile in 11 Texas counties. Our sparse farm populations lack adequate country community life. To be sure, there are small settlements, school and church neighborhoods, numerous subcensus-size country towns, but no country communities comparable with the farm villages of Europe and the Far East. As a result, the concert of wills for common advantages is extremely difficult. The farmers of the Western Hemisphere are not likely to develop the compact farm village life of the Old World countries, but not impossibly they can and must develop country community life based on transportation and communication. There is no reason why country community life in America, based on country telephone systems,

the rural free delivery, the rural parcel post, improved highways, motor cars, autotrucks, and radios, can not be just as effective as the compact farm village life of Europe. But overcoming the ills of sparse farm population with modern inventions and devices of this sort will be the slow development of generations in the Western Hemisphere.

2. There is an appalling amount of sheer illiteracy and near illiteracy in the farm regions of the South. More than nine-tenths of all the white illiteracy of the South is in our farm regions. The illiteracy of our country Negroes reaches even higher ratios. Country schools in the South steadily improve, but they will always lag behind the school advantages of the towns and the cities. Here is a fundamental condition directly related to the high-cost production of agricultural values.

3. An even greater obstacle lies in the types of southern farm tenancy. Farm tenancy in the Middle and Far West is a phase of capitalism. . . . The middle and far western tenant is frequently a cash-rent tenant. But in the South farm tenancy is an expression of poverty. More than four-fifths of all the southern farm tenants are croppers and their social estate has come to be well-nigh hopeless. The Negro farm tenants of the South are outnumbered by the white farm tenants by more than 800,000 souls. Southern tenancy and illiteracy are twin-born social ills. Tenancy breeds illiteracy and illiteracy breeds tenancy. Neither can be cured without curing the other. Together they produce a fundamental social situation that handicaps the development of southern agriculture. Our farm tenants do not want to own livestock, do not want to be bothered with meat and milk animals; they own few or no farm tools, implements, and machinery; they are not intelligent enough to use labor-saving farm machinery or to care for such machinery when furnished by the landlords; they lack the capital, the intelligence, and the enterprise to be effective in farm organizations. Our farm tenants are estimated to produce more than half of our cotton and nearly two-thirds of our tobacco, and the cotton and tobacco coöperatives have been unable to devise practical ways and means of controlling tenant crops with any advantage to the coöperating farmers.

4. Living from hand-to-mouth as most of our farmers live—both tenants and operating owners—the problems of farming as a business are well-nigh insolvable. They can not or will not act together in group production, group buying, group processing, group credit, and self-defensive group action in farm policies. Furthermore, in the lonely life of isolated farms, there is developed an economic and social inertia that is stubbornly resistant of change of any sort. The country-minded farmers of the South will probably always remain in the country on the farm, while our city-minded country people will rapidly drift into the cities. There ought to be a rapid cityward drift of city-minded country populations in the South. Southern cities are too few and too small to offer fair prices and profits for food and feed stuffs locally produced. Hence, our slow development of food and feed farming. At present the South is too rural, just as the North and East are too

urban. We need fewer farmers; we need fewer tenants; distinctly we need fewer absentee farm landlords; but just as certainly the South needs more farm owners who cultivate the acres they own.

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CHAPTER VII

FARM TENANCY

The Facts. The greatest single economic and social problem in North Carolina and throughout the South is farm tenancy. With 45.2 per cent of her farms operated by tenants, North Carolina is one of the nation's leading tenant states. In 1925 there were only nine states with higher farm tenant ratios. These were all southern except Nebraska, which comes next above North Carolina. Furthermore, there are only four states that have a larger number of farm tenants than North Carolina. They are Texas, Georgia, Mississippi, and Alabama.

In farm tenancy North Carolina is typically southern. Our tenant ratios are almost as high as the southern average; the types of tenancy conform with the southern types; and the agricultural practices are typically southern.

It might be interesting to note that in 1925 nearly two-thirds of all farm tenants in the United States, 65 per cent to be exact, were in the 16 southern states. More than one-half of all farms in the 16 southern states, 51.1 per cent to be exact, were operated by tenants. In the ten cotton belt states 57.8 per cent of all farms were operated by tenants. These tenants are not Negroes, as is so often imagined. In fact, two-thirds of all farm tenants in the South are white tenants, and only one-third are Negroes. In North Carolina white farm tenants outnumber Negro farm tenants by 10,524. To state it differently, 56.4 per cent of all farm tenants in North Carolina in 1925 were white farmers. The white tenant ratio fell from 1920 to 1925, the cause being the rapid influx of Negro farmers into the state following 1920.

North Carolina is headed into farm tenancy more rapidly than any other state except Texas, taking the fifteen-year period from 1910 to 1925 as the basis of comparison. From 1920 to 1925 only two states, Texas and Oklahoma, experienced larger numerical increases in farms operated by tenants. Both of these are large, and more or less frontier, states that have made considerable increases in cotton production during

Year	Number Farms	Number Farm Tenants
1900	224,637	93,008
1910	253,725	107,287
1920	269,763	117,459
1925	283,482	128,254

the last decade or so. In 1910 there were 107,287 tenant farms in the state, while in 1925 there were 128,254, an increase of 20,967. Texas alone had a larger increase during this period, and Texas is five times as large as North Carolina. The table on page 119 reveals the consistent growth of tenancy in North Carolina since 1900.

The Census of 1920 classifies farm tenants by types. The following table shows the distribution in North Carolina for that year:

TYPE	NUMBER
Share Tenants	58,819
Croppers	39,939
Share-Cash	468
Cash Tenants	9,425
Standing Renters	6,491
Unspecified	2,317

It is thus seen that the bulk of our tenants are share tenants and croppers, the two often being hard to distinguish. Neither possesses very much as a rule; the cropper usually possesses next to nothing in the form of worldly goods. More about this later.

Where the Tenants Are. Dare, an unimportant agricultural county, with only 7.6 per cent of her farms operated by tenants, has the lowest farm tenant rate in the state. Edgecombe County has rapidly been heading into tenancy during recent years and now has the highest farm tenant ratio in the state. Of all farms in the county 83.3 per cent are operated by tenants.

The counties with low farm tenant ratios are in the central Piedmont and Mountain areas, and the extreme eastern Tidewater counties. In other words, those counties of the state which do not produce much cotton or tobacco have few tenants, and for the most part these are the counties in which the tenant rate is decreasing. Generally speaking, the western counties are witnessing a loss of farm tenants, due to the exodus of this class to available industries.

On the other hand, the eastern half of the state, including the cotton belt along the South Carolina border, is rapidly headed into higher tenant ratios. The tenant belt of North Carolina is in the shape of a full crescent moon, with one horn in Rockingham County on the north, widening to the east and south as tobacco and cotton grow more important, then extending westward along the South Carolina border with the other horn resting in Cleveland and Rutherford counties against the Blue Ridge. In this area are located all the counties whose tenant rate exceeds the state average of 45.2 per cent, forty counties in all. In these forty counties whose tenant ratios are above the state average, two-thirds of all farms are operated by tenants. In the cotton-tobacco belt comprising approximately 57 counties are concentrated nearly nine-tenths of all farm tenants in the state. The per cent of farms operated by tenants has a close correlation with the per cent of agricultural wealth produced by cash crops, and vice versa.

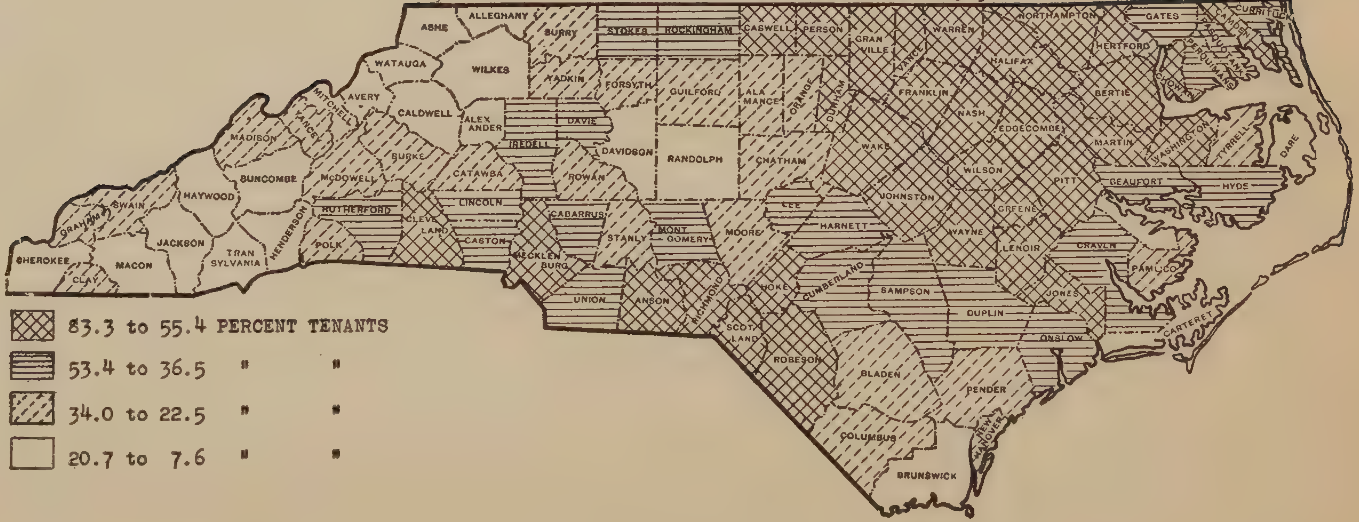
Ideal Tenant Crops. Cotton and tobacco are ideal tenant crops because they can be produced by unskilled labor. These two crops are admirably suited to the farm labor in this belt. In some of the counties more than half of the farmers are Negroes, and many of the white tenants would be failures at any other type of farming. Both cotton and tobacco are ready cash crops and can be sold in the fall immediately after harvesting and all farm accounts closed in one transaction. Credit can be secured to run the farm, even before the crops are planted, through our crop-lien system. Both crops are non-perishable or practically so, and can be retained by the landlord or merchant for long periods, or until the market suits. Both crops are easily transported from place to place and have large value for their bulk. Neither crop can be eaten by man or beast, making it safe to trust the tenant with them. They are handmade crops, producing high per acre yields, giving the landlord maximum returns for the land leased. Not only that, the two crops are thoroughly protected by law and perfectly protected by business methods. There are no crops on the face of the earth so admirably adapted to tenant farming as our two big cash crops, cotton and tobacco. Our Coastal Plain counties have no peer in the production of these two crops, and the 20 combination cotton and tobacco counties have no peer in tenancy ratio.

Cotton and tobacco are not only ideal tenant crops; they are ideally suited to a type of tenancy that exists only in the South—the cropper tenant. Economically and socially the cropper is the lowest form of tenancy found in the United States. It is perhaps the next step up after serfdom or peonage, neither of which exists in this country. Next after the cropper comes the share-renter, then the share-cash, and finally the cash tenants, few of whom are found in the South.

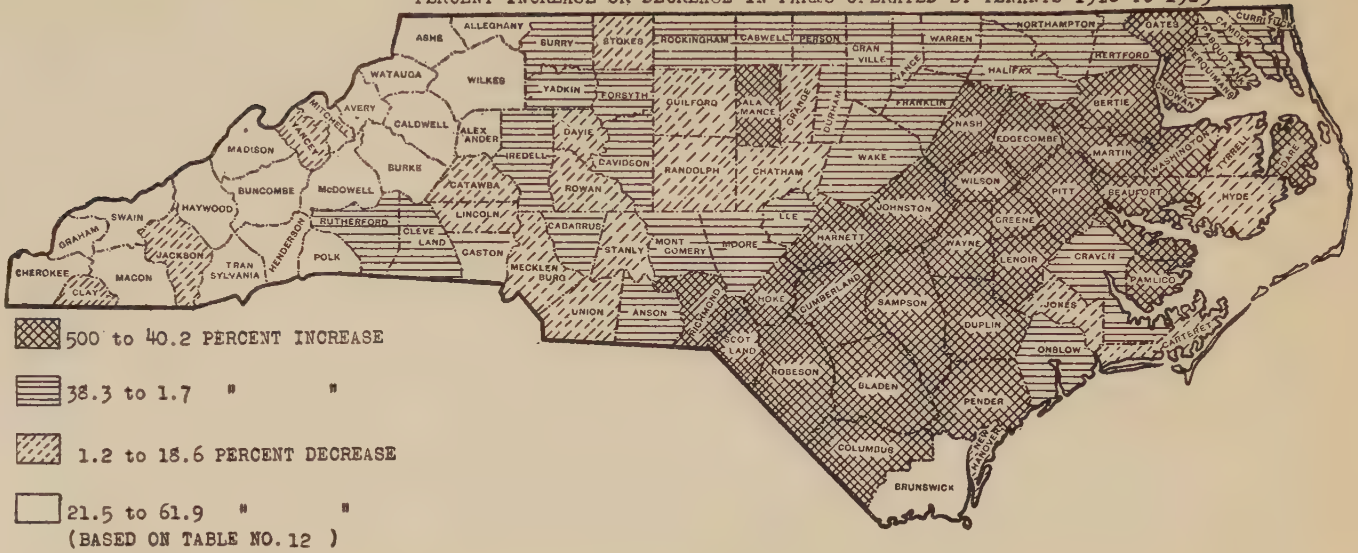
The difference between a renter and a cropper lies in the fact that, whereas the first runs himself, the latter is run by his landlord. He possesses no property and has no permanent habitation. He is constantly on the move from farm to farm. "It ain't no trouble for me to move," says the cropper, "I ain't got nothing but er soap gourd and er string er red peppers. All I have ter do is call up Tige, spit in the fireplace, and start down ther road." The cropper is as restless and as itinerant as the Wandering Jew; with his bedraggled family he goes from place to place, cultivating one farm after another on halves. He supplies nothing except his labor and that of his wife and children; the landlord furnishes everything else—land, dwelling, firewood, work stock, implements, pantry supplies, and even small advances of money. When

NORTH CAROLINA

PERCENT OF ALL FARMS OPERATED BY TENANTS IN 1925


ALLEGHANY
ASHE
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
HERTFORD
CHOWAN
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
VANCE
HALIFAX
FRANKLIN
NASH
EDGECOMBE
BERTIE
MARTIN
WASHINGTON
TYRRELL
DARE
AVERY
MITCHELL
YANCEY
CALDWELL
ALEX ANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
MADISON
BURKE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
HAYWOOD
SWAIN
GRAHAM
JACKSON
RUTHERFORD
LINCOLN
CABARRUS
LEE
JOHNSTON
GREENE
HARNETT
WAYNE
LENOIR
CRAVEN
PAMLICO
CHEROKEE
CLAY
MACON
TRAN SYLVANIA
HENDERSON
POLK
CLEVE LAND
GASTON
MECKLEN BURG
STANLY
MONT GOMERY
MOORE
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
SCOT LAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
▩ 83.3 to 55.4 PERCENT TENANTS
▤ 53.4 to 36.5 " "
▨ 34.0 to 22.5 " "
☐ 20.7 to 7.6 " "

PERCENT INCREASE OR DECREASE IN FARMS OPERATED BY TENANTS 1910 TO 1925


▩ 500 to 40.2 PERCENT INCREASE
▤ 38.3 to 1.7 " "
▨ 1.2 to 18.6 PERCENT DECREASE
☐ 21.5 to 61.9 " "
(BASED ON TABLE NO. 12)
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
VANCE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
BERTIE
MARTIN
WASHINGTON
TYRRELL
DARE
MITCHELL
AVERY
CALDWELL
ALEX ANDER
DAVIE
YANCEY
MADISON
BURKE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
JOHNSTON
GREENE
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
LINCOLN
CABARRUS
LEE
HARNETT
WAYNE
CLEVE LAND
JACKSON
HENDERSON
MONT GOMERY
MOORE
LENOIR
CRAVEN
POLK
TRAN SYLVANIA
GASTON
STANLY
CHEROKEE
MACON
CLAY
MECKLEN BURG
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
PAMLICO
UNION
ANSON
SCOT LAND
ROBESON
BLADEN
ONSLOW
CARTERET
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

the crop is gathered he gets half, and with deductions made for these advances, the landlord gets the rest. This is certainly a strange way to pick up a living; yet the most discouraging fact is that the cropper himself, though an object of anxiety to college professors and social reformers, is entirely satisfied with his own lot, and manages to extract a considerable amount of pleasure from it.

The cropper's self-satisfaction, however, is purely a manifestation of a sunny temperament; it has no relation to circumstances, for the external conditions of his life are about as hard as can be found anywhere in this country. The croppers are The Forgotten Men that Walter H. Page wrote about. Their dwellings are wooden shanties, sometimes mere log houses. In more than half of these dwellings it is possible to study astronomy through the holes in the roof and geology through the cracks in the floor. They have an illiteracy rate of 10 per cent, their sanitary conditions are deplorable, their reading matter consists of an occasional weekly newspaper, patent medicines serve them in lieu of the doctor, their wives are hoe-hands in the fields, and their children are also set to work at seven or eight, boys and girls alike. The church and the Sunday school play little part in the cropper's existence, though moonshining and boot-legging are well developed occupations.[1]

The Causes of Tenancy.[2] There are four fundamental causes of tenancy, according to Dr. Branson:

> They lie (1) in heredity—mainly in the poverty, illiteracy, insanitary living conditions, ill health, and hopelessness into which tenant masses are born; (2) in personal deficiencies—mainly in a lack of home-owning virtues, namely industry, thrift, sagacity, sobriety, and integrity; (3) in enveloping social-economic conditions that make it more and more difficult to buy and pay for farms and city homes, say under the crop-lien, time-price, supply-merchant system of farm tenancy areas . . .; and (4) in civic conditions—mainly the laws of western civilization controlling private property ownership, and the taxation of land values.

Other causes of farm tenancy with special reference to North Carolina and the South are: (1) historic conditions growing out of post-Civil War days when the freed slaves became tenants, and along with them many poverty-stricken whites; (2) lack of cash operating capital; (3) a vicious one-crop system of farming, and the inability to accumulate wealth under crop-lien conditions; (4) land speculation and large inherited holdings; (5) no policy that promotes home and farm ownership; and (6) as has been pointed out, the suitableness of cotton and tobacco as ideal tenant crops. North Carolina is the only state that grows both of these ideal tenant crops on a large scale. This fact mainly explains the large increase in farm tenancy within recent years.

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[1] *News Letter,* vol. IX, no. 27, containing a reprint of Dr. Branson's discussion in *World's Work.*

[2] *Home and Farm Ownership* (North Carolina Club Year-Book, 1921-22), p. 43. For an elaborate discussion of these points see pp. 42-50.

One of the great factors in perpetuating farm tenancy is the supply-merchant system. This is a unique southern institution, developing out of post-Civil War conditions, and continues in full force mainly in the cotton belt counties. This system is usually designated "the supply-merchant—crop-lien—time credit business." The following quotation from the South's foremost agricultural journalist[3] gives some idea as to why time-prices perpetuate farm tenancy:

> The greatest curse of the agricultural South is our vicious time-prices credit system. It is a curse alike to landowners, tenants, merchants, bankers, professional men, and to county and state as units of government. It is holding our whole section back just as truly as it was forty years ago when that great southern orator and statesman, Henry W. Grady, portrayed its blighting influence on our section and gave his eloquent and stirring prophecy of a better day:—
>
> "When every farmer in the South shall eat bread from his own fields and meat from his own pastures and be disturbed by no creditors and enslaved by no debt, shall sit amid his teeming gardens, and orchards, and vineyards, and dairies, and barnyards, pitching his crops to his own wisdom and growing them in independence, making cotton his clean surplus, and selling it in his own time, and in his chosen market, and not at a master's bidding, getting his pay in cash and not in a receipted mortgage that discharges his debt but does not restore his freedom, *then shall be breaking the fullness of our day.*"
>
> As *The Progressive Farmer* has shown by careful investigations made in 1915 and again in 1924, the average supply-merchant charges from 15 to 22 per cent more for an article sold "on time" than when sold for cash. Around 20 per cent extra for "time-prices" credit seems to be the rule from North Carolina to Texas inclusive. And if a merchant charges 20 per cent extra for a credit item running six months, that is equal to the customer paying interest *at the rate of 40 per cent a year.* On the other hand, if (as many believe) the average time-price item runs only four months before the usual maturity of the store account on November 1, then paying 20 per cent extra to get credit for only four months *is equal to paying interest at the rate of 60 per cent per annum*—or ten times the standard rate of interest in most of the United States. No business on earth can succeed if it must pay at the rate of 40 per cent to 60 per cent a year for its operating capital, and for the tenant farmer to have to pay such rates foredooms him to poverty and failure.

Advantages and Disadvantages of Tenancy. Tenancy is necessary under our land system. It is usually considered that a moderate amount of tenancy is nothing to be alarmed over. It is only where tenancy comes to be a substitute for ownership, a system within itself with little chance to rise into ownership, that it becomes a serious problem. Tenancy in the cotton-belt South generally is a system, a substitute for ownership, not a stepping-stone into ownership. Elsewhere[4] the general economic results of tenancy are discussed. At this point it might be well only to outline the economic advantages and disadvantages of farm tenancy, keeping especially in mind North Carolina and the rest of the South. The economic advantages in part are as follows:

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[3] Clarence Poe, *Progressive Farmer,* Jan. 19, 1929.

a. Affords a living to landless, moneyless labor.
b. Supports agriculture in regions lacking cash operating capital.
c. Is a school of experience and a stepping-stone into farm ownership—to southern Negroes mainly. In the South one-fourth of the Negro farmers are owners, in Virginia nearly three-fourths, in North Carolina nearly one-third.
d. Produces large crop totals per year, large per acre totals, but small per man.

Some of the economic disadvantages are the following:

a. Steady decrease in the average size of farms. Southern farms are the smallest in the United States. North Carolina farms are the smallest of any state, counting only cultivated area. Cultivated acres per farm in North Carolina were only 19.5 in 1925; 125 acres in 1860.
b. Depletion of soil fertility.
c. Handmade cash crops. Waste of human, horse, and machine power.
d. Crop farming mainly, hindering livestock development.
e. Lower standards of living.
f. Production of great farm wealth annually, but little of it retained where produced, mainly because of the crop-lien system and excessive labor cost in handmade crops.
g. An unstable, unsafe basis for agriculture.
h. Small farm dividends because cash crops are a gamble with market prices.
i. Home-raised supplies neglected, and farm operation on a credit basis.
j. An unsafe, unstable basis for agricultural labor, due mainly to the loose one-year contract. The social consequences are largely due to the constant migration of tenants.

Social Effects of Tenancy. From a social point of view tenancy is bad, chiefly because farm tenants are forever on the move. It is generally estimated that approximately 40 per cent of them in the South change farms every year. The rate is equally high in North Carolina. If this is true, then approximately 300,000 farm tenants and their families change farms in North Carolina each year. The highways in December, January, and February are literally dotted with tenants who are playing a game reminiscent of the childhood pastime called "fruit-basket." The reasons for their annual shift are almost as numerous as the farmers represented. Often they move for no apparent reason. They just have a habit of moving. It is common to find a tenant who has lived on a dozen different farms and perhaps in a dozen different communities. They often go from one state to another. Hundreds, even thousands, have recently come into North Carolina from boll-weevil-ridden Georgia and South Carolina. This wandering mass of humanity has no abiding interest in any community because the tenants have no stake in the land. They are strangers, sojourners, pilgrims, forever on the move, and always discontented. Nor can they be blamed for their discontent. They are forever seeking to better their condition by trying new fields. This spells disaster to schools, school attendance, school consolidation, church membership, attendance, and support. It spells disaster to good roads development, public health sanitation, law and order, community organizations, and enterprises for progress and prosperity, welfare and well-being. It spells disaster for coöperative marketing associations. A landless, homeless, wandering tenant population cannot become a coöperative machine. Coöperation is rooted in land ownership and a stable membership, and a farm civilization rooted in tenancy can hardly succeed with coöperative enterprises.

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[4] See chap. VI.

Tenancy and Illiteracy.[4] Tenancy and illiteracy go hand in hand. The states of the Union bulk up in illiteracy as they are grounded in tenancy. So largely with the counties of this state. Our steady increase in illiteracy among white men and women is due to our increase in farm tenancy in 50 counties of the state.

Tenancy and Churches. The churches may not consider it so, but farm tenancy is a church problem. A very small per cent of farm tenants ever join any church and a very small per cent are to be found attending churches. They are in no community long enough to form church connections. Non-church membership and tenancy go hand in hand. For instance, Edgecombe County ranked 100th in church membership (1916) and 99th in farm ownership (1920). In eight of the high tenancy counties more than half of all people above 10 years of age belong to no church whatsoever. The church must destroy tenancy and illiteracy, or tenancy and illiteracy will destroy the church in our country regions.

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[4] For detailed discussion see chap. XVI.

Tenancy and Crime. The ownership of land tethers a man to law and order better than all the laws on the statute books. It breeds in him a sense of personal worth and family pride. It identifies him with the community he lives in and gives him a proprietary interest in the church, the school, and other organizations and enterprises of his home town or home community. It enables him to hold his family together, makes him a better father, a better neighbor, and a better citizen, mainly because it makes him a stable, responsible member of society. Landless men, white or black, in town or country areas, tend to be restless, roving and irresponsible; and the restless, roving, irresponsible multitudes of America are a fundamental menace to society.

Of 80 criminals convicted in Chatham County 66 were tenants, owning not an inch of the soil they cultivated or a single shingle in the roof over their heads. The tenants are nearly exactly one-third of the population, but they committed more than four-fifths of all the crimes.

The landless are 40 per cent of the population in Orange County, North Carolina, but 75 per cent of the crime in 1925-26 was committed by cropper farmers and tenants, town and country. In Wilson County, North Carolina, the same year, the landless are almost exactly 80 per cent of the population, but they committed 96 per cent of the crime. In Crenshaw County, Alabama, during the last twelve months, the tenants and croppers committed 85 per cent of the crimes, although they were only 45 per cent of the population. And I may add, by the way, that crime in all these counties is just as certainly related to home ownership as to race. Among the 456 landowning Negroes in Chatham County, only two broke into the court records of crime. There are 191 landowning Negroes in Crenshaw County, Alabama, but only two of them were guilty of crimes during the twelve months ending September 1. In Wilson County, North Carolina, there are 720 landowning Negroes, but not one of them was haled into court and convicted in the year 1925-26. A home-owning Negro is more than apt to be a decent, law-abiding citizen.[6]

So much by way of indicating the social effects of farm tenancy under southern conditions.[7] To summarize, there is abundant proof[8] that under North Carolina and southern conditions generally farm tenancy has the following effects:

1. Tenancy strangles intellectual development.
    a. Children are kept out of school to work.

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[6] Branson, *News Letter*, vol. XIII, no. 8.

[7] A full account of social effects of tenancy in the South is carried in the North Carolina Club Year-Book, *Home and Farm Ownership.*

[8] *Ibid.* See especially, in Year-Book, Dickey and Branson, "How Farm Tenants Live in Mid-State Carolina." See also Taylor and Zimmerman, *Economic and Social Conditions of North Carolina Farmers;* Bizzell, *Farm Tenantry in the United States.* Also hundreds of tables by which economic and social conditions are compared and correlated.

  - b. Tenants move every year or two or three, and they move in the middle of the school term.
  - c. Stimulus for intellectual development is lacking.
  - d. Tenancy and illiteracy go together.
  - e. Tenancy hinders public school development: property, support, local tax districts, etc.

2. Tenancy hinders moral development.
   - a. High tenancy rates mean low church membership and church attendance rates.
   - b. Illiterates and near-illiterates are ashamed to attend church because of inability to take part in the exercises, or they cannot contribute to the collection, or they cannot afford Sunday clothes.
   - c. Often their religion is of the emotional type.
   - d. Loose methods of finance and account-keeping promote dishonesty on both sides.
3. Tenancy breeds class consciousness which is always destructive. Nowhere in the United States is class consciousness or class distinction so pronounced as in the South. Land aristocracy and land orphanage are bad for a democracy, as many southern states testify.
4. The instability of tenancy hinders the promotion of rural social organizations of all sorts.
5. Farm tenancy is the deadliest foe to coöperative enterprise—economic, social, or civic. The South lags behind the rest of the nation in coöperative effort.
6. Farm tenancy hinders political development. Usually tenants do not vote at all. They are easily swayed by unscrupulous politicians. Witness the South again!
7. Home ownership brings out the highest and noblest qualities in man. The farm and home owner is a home lover, home defender, and community builder. For the tenant the incentive is lacking.

Some Remedies for Farm Tenancy. Space does not permit a full discussion of any aspects of the farm tenant situation in North Carolina. Especially is it impossible to go into a discussion of remedies[9] for farm tenancy. The chief purpose is to present conditions as they exist in the state. It seems appropriate, however, to list a few of the remedies that have been suggested at one time or another. All of them are wholly or partially in operation either in some parts of the United States or in some foreign country.

1. An improved system of taxation designed to promote the common good. This might involve:
   - a. Classification of property for tax purposes.

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[9] *Home and Farm Ownership,* Section V, is devoted to remedies for farm tenancy. Almost all of those suggested here are discussed in detail.

   b. Low rates on small properties used by owners.
   c. The taxing of equities only. Deduction of solvent credits applies to all forms of property except land and homes. The part-owner pays a tax on the full value of the property. This discourages the would-be owner.
   d. The progressive land tax. As generally stated this means: low rates on improvements, higher rates on land, and still higher rates on land held out of use for speculative rise in value. In New Zealand they add 50 per cent if the owner lives outside New Zealand. The progressive land tax is designed to make land available to would-be owners.
2. Improved system of rural credits, especially a type of rural credits that will release tenants from dependence upon the supply-merchant system. The European credit union idea seems to offer most hope.
3. Written contracts and long term leases to replace the usual oral contract and one-year lease. The Miller[10] system as an illustration.
4. The adoption of crop liens reading in terms of food and feed crops as well as of money crops, as in Texas, where it was imposed by the bankers.
5. Diversification, mainly toward food and feed crops.
6. Building and loan associations for farmers, as in Ohio, and as provided for in North Carolina.
7. Land nationalization. It is too late to advocate this except possibly for land still owned by the federal government. Under this system everyone rents from the state.
8. State aid to farm tenants, as in Denmark, New Zealand, England, and other countries. Practically nothing has been done to promote farm ownership by any state of the United States.
9. Federal aid (1) by modifying the Federal Farm Loan System, and (2) through postal savings as proposed by Hon. Clyde Kelly.
10. The California Plan[11] of community settlements. There are many excellent economic and social advantages involved in the California Plan. A few such community settlements would be highly beneficial in North Carolina.

Three of these proposals, if put into practice, would render immediate aid. First, the progressive land tax suited to our needs, which would make it possible for tenants to buy farms. Many agricultural areas outside the United States have such a tax. In one form or another it has been adopted by several American cities.[12]

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[10] W. B. Bizzell, *Farm Tenantry in the United States,* pp. 193-95.

[11] Elwood Mead, *Helping Men Own Farms.* See also *Home and Farm Ownership,* chap. 22.

[12] Notably Pittsburgh, Houston, and New York.

The second is credit machinery through coöperative credit unions. This state has the best credit-union law in the nation, but farmers are making very little use of it. If farmers could provide their own credit at six per cent or less as in some European countries and save the enormously high interest rates they now pay, they could accumulate wealth and in time buy farms as they have done in Denmark, where now 91 per cent of the farmers own their land. Coöperative credit unions and coöperative marketing are our two big needs in the field of coöperative activity in the South.

The last, surest, and best method is to produce all the food and feed crops needed for consumption on the farm, and then produce the two best cash crops on the face of the earth, cotton and tobacco, of which we in the South have a monopoly, and bank the wealth secured from the sale of these crops. This practice, if followed for ten years, would make our farmers rich. It would enable us to accumulate a surplus with which to buy farms and move from farm tenancy over into farm ownership.

Our leading tenant counties should begin to look for some sensible solutions to the tenant problem. If the practice of the last 60 years continues, eastern North Carolina will be a land of a few landlords and many tenants. History teaches us the peril of this condition.

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CHAPTER VIII

INDUSTRY IN NORTH CAROLINA

North Carolina is today the South's leading industrial state and one of the important industrial states of the Union. The 1927 Census of Manufactures showed that North Carolina ranked fourteenth in total value of factory output and thirteenth in value added by manufacture. As late as 1899 the state ranked twenty-eighth in value of factory products. A quarter of a century ago there was very little industrial development in the state. As late as 1914 the total value of our factory output was less than $300,000,000 annually. The World War stimulated industrial development in North Carolina, especially in the tobacco and textile industries. During the five-year period following 1914 the value of our factory output increased from less than $300,000,000 to $944,000,000. The following tables[1] show the growth of industry in North Carolina since 1899.

RECORD OF INDUSTRIAL GROWTH

	1899	1919	1927
Wage Earners	72,422	157,659	204,767
Wages Paid	$14,051,784	$126,753,000	$ 158,287,197
Value Materials used	44,854,224	526,906,000	562,086,283
Value of Output	85,274,083	943,808,000	1,154,617,636
Value Added by Manuf.	40,419,859	416,902,000	592,531,353

VALUE OF FACTORY PRODUCTS, 1899-1927

Year	Value of Output	Year	Value of Output
1899	$ 85,000,000	1919	$ 944,000,000
1904	142,000,000	1923	951,000,000
1909	216,000,000	1925	1,050,000,000
1914	289,000,000	1927	1,155,000,000

Location of Industry. The industries of North Carolina are located mainly in the Piedmont country and secondarily in the Western Coastal Plain. The Tidewater and Carolina Highlands counties have very little industrial development. The industrial area is in the shape of a reap hook, with a broad blade and handle, "the point of the blade in Raleigh, the curve following the bend of the Southern Railway to Charlotte, and the handle reaching westward through Gaston and Lincoln counties to Rutherford. In this area . . . are three-fourths of our factory enterprises, more than four-fifths of all the bank capital of the state, and right around six-sevenths of all the business in bank loans and discounts."[2]

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[1] All industrial data in this chapter are taken from the U. S. Census of Manufactures for the years indicated, unless otherwise noted.

TREND OF LARGEST INDUSTRIES IN NORTH CAROLINA

	1899	1909	1919	1927
All Manufactures	$85,274,000	$216,656,000	$943,808,000	$1,154,617,000
Agriculture	68,625,000	131,072,000	503,229,000	361,605,000
Cotton Products	28,373,000	72,680,000	318,368,000	310,802,000
Lumber (Including Planing Mills)	17,442,000	33,525,000	66,328,000	53,190,000
Mineral Products	1,458,000	2,874,000	6,405,000	12,619,000
Tobacco Products	13,851,000	35,987,000	33,188,000	413,274,000
Furniture	1,023,000	1,547,000	29,725,000	53,551,000

THE TEXTILE INDUSTRY

There are three industries that stand head and shoulders above the others in the state. In order of importance they are textiles, tobacco, and furniture. There are many other types of industries, and their total value of output runs into large figures, but lack of space prohibits an account of them individually.

It seems appropriate to preface an account of the present textile development by citing a few high spots in our textile history. David Clark,[3] Editor of the *Southern Textile Bulletin,* says:

> Historians differ relative to the early cotton mills in the South, but from a study of the subject I consider the following the most reliable list of early cotton mills.
>
> 1813—Michael Schenck and Absolom Warlick (his brother-in-law), built a mill on Mill Branch, one and one-half miles east of Lincolnton, N. C. Much of the machinery was built by Michael Bean on the premises. The original contract for the machinery is still in existence. For $1,300 Bean built and installed two spinning frames with 70 flyers each and 2 cards and 1 picker. John Hoke and Dr. James Bivens bought an interest in the mill in 1819.
>
> 1817—Joel Battle and Henry A. Donaldson built a mill at the falls of Tar River (now Rocky Mount), N. C. They worked negro slave labor. Mill was burned by union army, 1863.
>
> 1830—Henry Humphries built the "Mount Hecla Mills" at Greensboro, N. C. It was three stories high and was the first steam cotton mill in North Carolina. The machinery was shipped from Philadelphia to

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[2] *News Letter,* vol. VII, no. 50.

[3] From an undated clipping from the *Durham Morning Herald.*

Wilmington, N. C., thence up the river to Fayetteville, N. C., and carried across the country in wagons to Greensboro. Thomas R. Tate was a clerk for Humphreys and later bought the mill. When wood for fuel grew scarce around Greensboro, Tate moved the mill by wagon to Mountain Island, N. C., where it was operated by water power.

1832—E. M. Holt built a mill on Alamance Creek, in Orange County, N. C. W. A. Currigan was associated with him.

1833—John W. Leak built a mill at Great Falls, N. C. It was chartered as "The Richmond Manufacturing Company." Mill was burned by the union army in 1865, and rebuilt in 1869.

1833—General McDuffe and Mitchell King built a mill at Vaucluse, N. C.

1836—Francis Fries and Dr. Schumann built a mill at Salem, N. C.

1838—John M. Morehead built a mill at Leaksville, N. C.

1847—William Gregg built a mill at Graniteville, S. C.

According to statistics the first five cotton mills built in the South were on North Carolina soil, and the names of Schenck, Warlick, Battle, Tate, and Holt are still prominently connected with the industry in this state.

It is probable that the industry would have grown more rapidly in North Carolina than in Massachusetts, but prior to the Civil War it was more profitable to farm with slave labor than to manufacture cotton into cloth, and the development was so slow that in 1860 there were only 41,834 spindles and 761 looms in North Carolina, and due to destruction by the northern army those figures had been reduced to approximately 30,000 spindles and 600 looms in 1872.

In 1880 the spindles in North Carolina had slightly more than doubled, being 92,380, and very small progress was made from that date until the early nineties, when the real movement for the expansion of our cotton manufacturing industry began.

In 1888 J. W. Cannon, a merchant of Concord, N. C., raised $75,000 and built a little mill of 4,000 spindles. When he died in 1921 his original mill had grown to 165,000 spindles and he controlled and operated 600,000 spindles and 10,000 looms, the valuation of which might be conservatively estimated at $30,000,000.

The great denim mills built by Moses and Caesar Cone, and by W. A. Erwin, the gingham business of C. W. Johnston, the damask business of S. F. Patterson, hosiery business of the late Julian S. Carr, knit underwear business of P. H. Hanes and Sons, and the fine yarn business of A. C. Lineberger are a few illustrations of successful cotton manufacturing in North Carolina.

The textile industry stands first in North Carolina. Our principal cotton manufactures are denim, damask, towels, underwear, hosiery, gray goods, various colored goods, plush, yarns, and blankets, sold largely through outside commission and financial houses.

Lint equivalent to the state's entire production supplemented by

400,000 bales, mostly inch staple, yearly imported from other states, is consumed in the state's output, which stands first in value among the states of the nation. Spindleage ranks second, but active spindle hours rank first, and number of cotton mills first in the entire country. In only 15 states does the value of manufactures reach $1,000,000,000, and in North Carolina cotton manufactures have contributed 30 per cent towards placing the state among this outstanding group, representing possibly the most influential and diversified industry.

To summarize the textile mill situation in North Carolina: on January 1, 1928, there were 579 mills, having a total spindleage of 6,388,160, 94,957 looms, 27,269 knitting machines. Since January 1, 1928, there have been completed, or are under construction, some 26 new mills or nearly twice as many as in any other southern state. There are actively working in the textile mills of the state approximately 124,000 employees.

Rayon has now become so closely identified with cotton yarns that a sketch of cotton in North Carolina would be incomplete without reference to this new entrant into the textile field. North Carolina now consumes an immense tonnage of rayon material, leading all southern states. It has suitable water, cheap coal, power, unexcelled transportation facilities, wood pulp and cotton linters, labor, good will, and consumers, all of which should contribute to the expansion of the rayon manufacturing industry in the state. Several well-equipped rayon dye houses now offer their services to the public in North Carolina, and one large rayon producing plant is under construction, and others are contemplated.

Knit Goods. The manufacture of knit goods is one of the ten major industries of the state. This phase of the textile industry is growing at a rapid pace. In 1927 there were 129 knit goods factories employing more than 17,000 wage earners. The value of output of these mills in 1927 was more than $61,000,000, the value having increased by 40 per cent over the 1925 figure.

Another division of the textile industry that has grown rapidly of late is the dyeing and finishing of textiles. Like all textile areas, North Carolina began as a spinning state, coarse yarns predominating, and has gradually moved over into the manufacture of finished goods. Our output still consists primarily of spun yarn, but the quality has grown better, and the ratio of spun yarn to total value of textile output has steadily grown lower.

Textile Opportunities. An analysis of the census figures for 1927 reveals the character of our textile industry and also shows the unoccupied fields. Although already holding a high place in the textile field, there are opportunities for a wide development in unoccupied branches of the industry. The United States Census of Manufactures lists 54 groups of textiles and their products, while only 21 of these are shown to be produced in North Carolina. This signifies that there are 33 lines of textiles and their products being manufactured in the country that are not being turned out by the mills in this state.

Small and Medium-Sized Units. North Carolina textile mills are prevailingly small or medium-sized, averaging about 10,000 spindles. In practically all the great textile centers, except this state, the mills as a rule are large concerns, notably in England and in the New England states where the spindleage is from three to five times that number. Even in South Carolina and Georgia the average mill is much larger than in this state. Textile mills are found scattered all over the entire state, although the bulk of them are located in the Piedmont area between Durham and Shelby. Almost every little town in this area has in it one or more small cotton mills.

Just what should be the size of a textile mill for maximum efficiency probably has never been determined. The size necessarily would vary under different conditions. The available data point to the conclusion that the textile industry in North Carolina is, relative to other states, in a very healthy condition. Better than any other state we have weathered the depression that has existed in the textile industry for nearly a decade; our spindles have averaged more hours per month; we have put in more new spindles than any other state; and labor troubles have been practically unknown until 1929. At the time this is being written strikes are on at three mills, and it appears that North Carolina mill workers are not so docile and contented as they have been pictured. Already there has been bloodshed, and it is probable that our labor troubles are just beginning. The size of our mill undoubtedly has had much to do with the general good feeling that has existed between employer and employee. The average mill owner in this state is in close contact with his workers, knows their first names, and grew up in the same area with many of them. A majority of employers seem to have the welfare of the workers at heart, doing what they can to make life happy and worth while for their employees. Of course no one claims that all employees are contented. They are not. Present strikes prove it, and we may rest assured that there will be other labor troubles, for industrialism, to judge from the past, inevitably means strife. It goes without saying that everything possible should be done to reduce the causes of conflict. Many people believe that a prime condition of good relations is the small mill, owned by local capital and manned by local labor, but that does not solve the problem of the large mill, owned outside the state.

Will Assume Leadership. In many respects North Carolina is now the leading textile state of the Union. It already can boast that: Kannapolis has the largest towel mills in the world; Durham has the largest hosiery mills in the world; Greensboro has the largest denim mills in the United States; Roanoke Rapids has the largest damask mills in the United States; Winston-Salem has the largest men's underwear mills in the United States. We lead in aggregate spindle hours, in amount of raw materials consumed annually, and in number of textile mills. The state has everything that is conducive to textile development—an abundance of cheap water power, available labor, low living costs in an area of mild climate and cheap food, an abundance of near-by raw materials, and plenty of executives who are already skilled managers. No other state has a combination of all the essentials to textile development such as is possessed in North Carolina.

The belief that North Carolina is to assume leadership in the field of textiles is not confined to this state. Many northern mill men have expressed this opinion. The President of the National Association of Cotton Manufacturers says, "Our principal competition comes from the Piedmont district of North and South Carolina. There the climate is good and bracing. The operatives are pure-bred American stock, from the mountains. Like our original New Englanders, they have had hard work to make a living, and appreciate opportunity. These people are of great native intelligence and quick to learn. Mills have sprung up on every hand. Every little town wants a mill and offers free land, exemption from taxation, and all sorts of encouragement to the man who knows how to make cloth and will start a mill.

"The record is clear enough, the cotton industry is gradually slipping away. In the past various factors have helped us. Massachusetts had far more skilled help and oversight. We had the finishing works where southern goods must be shipped to be bleached, dyed, or printed. Now, there is excellent skilled help and supervision in the South."

Another mill man from New Hampshire says, "Success in southern mills, especially in North and South Carolina, has been due not to long hours of work, and low pay, nor to the employment of unintelligent workers, as the labor unions would have the country believe, but to efficient management. By efficient management I mean 100 per cent efficiency."

"Frankly we are up against it," says an official of the Fall River Cotton Manufacturers Association. "Conferences are useless. We can operate only at a loss, and if we are to remain in business there is but one thing we can do, follow the general move to the South, to the Carolinas. . . . To compete with southern mills and New England labor conditions is impossible; even the attempt is suicide."[4]

The Tobacco Industry

North Carolina is the world's chief tobacco center. The state grows more tobacco than any other state in the Union, and its margin of

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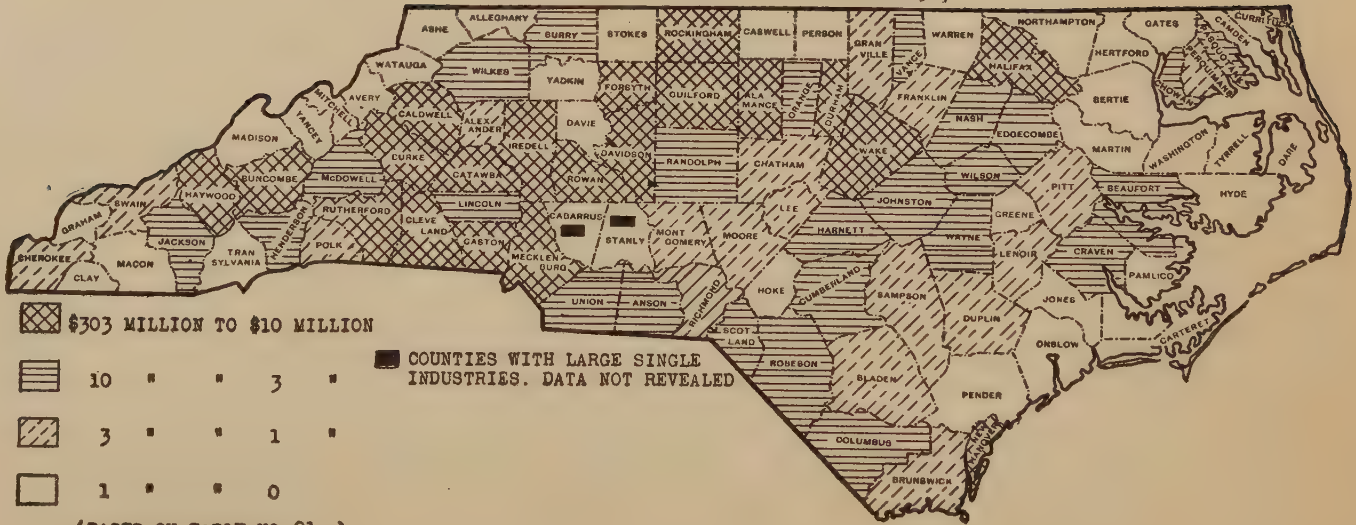
[4] *News Letter*, vol. IX, no. 29.

NORTH CAROLINA

VALUE OF FACTORY PRODUCTS FOR THE YEAR 1927


▩ $303 MILLION TO $10 MILLION
▤ 10 " " 3 "
▨ 3 " " 1 "
☐ 1 " " 0
■ COUNTIES WITH LARGE SINGLE INDUSTRIES. DATA NOT REVEALED
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
VANCE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
BERTIE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
AVERY
MITCHELL
YANCEY
MADISON
CALDWELL
ALEX ANDER
IREDELL
DAVIE
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BURKE
CATAWBA
ROWAN
BUNCOMBE
McDOWELL
HAYWOOD
SWAIN
GRAHAM
JACKSON
HENDERSON
RUTHERFORD
CLEVE LAND
LINCOLN
GASTON
CABARRUS
STANLY
MONT GOMERY
MOORE
LEE
HARNETT
JOHNSTON
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
CHEROKEE
CLAY
MACON
TRAN SYLVANIA
POLK
MECKLEN BURG
UNION
ANSON
RICHMOND
SCOT LAND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

(BASED ON TABLE NO. 21)

leadership in tobacco manufacture is so wide that North Carolina can almost lay claim to having a monopoly of this industry. An historical account of its growth in North Carolina[5] makes interesting reading, but only a few high spots can be chronicled here:

The white man was introduced to tobacco in October, 1492, when Columbus and his crew landed on the shores of Cuba and were horrified as well as mystified to find dark-skinned savages exuding, as they thought, smoke from their bodies. Columbus obtained tobacco seeds and carried them back to Spain, where later the Spanish gentlemen cultivated the herb in their gardens, or "cigarrals"—hence the derivation of the words, cigars and cigarettes. Tobacco was introduced into England by Sir Walter Raleigh, and into France by Jean Nicot, whose name has been immortalized by "nicotine."

In 1612 John Rolfe raised the first chronicled crop at Jamestown, Virginia. The production rapidly increased, England being the chief importer. For several years tobacco was legal tender in the Virginia colony. Tobacco culture was later taken up by Maryland, the Carolinas, Kentucky, and Tennessee.

In 1852 two brothers, Elisha and Eli Slade, produced in Caswell County, North Carolina, the first lemon-yellow tobacco, the type for which the Carolinas and Virginia are famous, North Carolina being the world's leading producer of bright-leaf tobacco. In 1858 two Orange County men, R. F. Morris and T. B. Wright, started to manufacture tobacco at what is now the city of Durham. In 1862 J. L. Green of Person County, sensing the incoming tide of fortune, bought out Morris and Wright. During the Civil War tobacco was used by the Confederate armies. In 1865 some Union soldiers quartered near Durham broke into Green's barn and stole his tobacco. This theft proved to be the means of advertising his tobacco, and the vast tobacco industry of today was started on its way to success. It was Green and his partner who originated "Bull Durham Tobacco." After Green's death his partner took in J. T. Day and J. S. Carr. The business had a wonderful growth and was finally merged into the old (now defunct) American Tobacco Company.

In 1865 the Dukes—Washington and his three sons, J. B. Duke, B. N. Duke, and Brodie Duke—entered the tobacco arena, creating the brand known as Duke's Mixture. The tobacco industry rapidly expanded, important entries being Reynolds at Winston-Salem, Liggett and Meyers in St. Louis, the Lorrillards, and others. In 1884 the Dukes with G. W. Watts established the W. Duke Sons and Company branch and the same year built the present factory in Durham. In 1881

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[5] A history of the early beginnings of this industry is given by William K. Boyd in *The Story of Durham.*

J. B. Duke opened the first cigarette factory on Rivington Street, New York.

In 1890 J. B. Duke, seeing the need of combining and the fruits which would result, merged practically the entire tobacco interests and industry of America, calling this combination The American Tobacco Company, but it was dissolved by the Supreme Court of the United States in 1911 and was broken up into four companies,[6] all of which have prospered greatly and are now among the largest industrial corporations of America.

The following table shows the growth of the tobacco industry in North Carolina since 1899:

Item	1927	1914	1899
No. of Establishments	21	33	96
No. Wage Earners	15,976	10,467	6,583
Wages	$ 12,545,075	$ 2,984,000	$ 907,000
Taxes	204,473,505*	12,151,000	....
Raw Material, Fuel, Power	124,712,918	24,310,000	4,312,000
Value of Output	413,274,114	57,861,000	13,851,000
Value Added by Manuf.	288,561,196	33,551,000	9,539,000

* For year ending June 30, 1928, federal taxes only. The cigarette tax alone for the calendar year 1928 was $193,342,000.

Almost the entire output of our tobacco factories comes from three centers—Winston-Salem, Durham, and Reidsville.

The products of our tobacco factories are cigarettes and pipe smoking tobacco (manufactured tobacco). For the fiscal year ending June 30, 1928, North Carolina paid to the federal government on tobacco and tobacco manufactures a total tax of $204,473,505. This represented 52 per cent of the entire tobacco tax paid by all the states. North Carolina paid 61 per cent of the nation's cigarette tax and 35 per cent of the entire tax paid on pipe smoking tobacco. This means that 61 per cent of all cigarettes manufactured in the United States are made in North Carolina, and more than one-third of all pipe and cigarette "makings" are made in this state. North Carolina in 1928 manufactured approximately 65,000,000,000 cigarettes, and more than 120,000,000 pounds of manufactured tobacco, not counting cigarettes and manufactured tobacco made in the state but exported to foreign countries.[7]

During recent years the federal tobacco tax paid by North Carolina has increased at the rate of approximately $20,000,000 annually, so that the factory value of output has increased more than $40,000,000 annually. It is largely our tobacco tax that explains why North Carolina in 1928 paid more taxes into the federal treasury than any other state except New York,[8] having replaced Pennsylvania during the year 1928, and Illinois during the year 1927.

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[6] The R. J. Reynolds Company, The American Tobacco Company, P. Lorrillard, and Liggett & Meyers Tobacco Company.

[7] No federal tax is levied on exported manufactured tobacco.

Calculating from the tax paid in 1928, it is estimated that the value of output of our tobacco factories in that year was in excess of $450,000,000. This is more wealth than was produced by all the farms of North Carolina combined, counting crops and livestock. One tobacco company in the state probably made a larger net profit during the year than was made by all the farmers of the state.[9] The value of output of this company alone about equals the value of all crops produced in the state that ranks second in number of farms! The value of output of our tobacco factories today probably exceeds the value of output of our textile industry.

North Carolina grows approximately one-third of all the tobacco (value) grown in the United States. She manufactures more than half the tobacco manufactured in the United States. Tobacco production and manufacture have rapidly overtaken cotton production and textile manufacture and seem now to be drawing away from the crop and the industry that have ranked first in the state for a full century. No longer is cotton "king" in this state. North Carolina is now ruled by two kings, and the more prosperous is tobacco. This refers to both the farm and the factory. More people are still engaged in cotton production and textile manufacture, but more profits are now being made out of tobacco production and tobacco manufacture. Every indication points to a continued growth of the tobacco industry, which was started by the Civil War, popularized by the World War, and enormously boosted when women took to tobacco.

FURNITURE

North Carolina's third great industry is furniture manufacture. The furniture industry ranks third in capital invested, third in number of wage earners, in value of products, and in value added by manufacture, being exceeded only by tobacco and cotton manufacturing industries.

About 35 years ago several wide-awake young men conceived the idea of producing furniture in North Carolina and erected a small plant at High Point. At that time hardwoods were plentiful at low prices. Labor was abundant and, although unskilled, was capable of being developed into first-class mechanics. The first venture was successful and was rapidly followed by other plants at High Point, Mebane, Charlotte, and other places in North Carolina. Today High Point, Winston-Salem, Lenoir, Thomasville, Statesville, Hickory, Mount Airy, Morganton, Mebane, Lexington, Hazelwood, North Wilkesboro, Elkin, and a number of other towns are important centers, each having several large furniture factories.

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[8] Total federal tax for calendar year 1928 paid by North Carolina was $236,642,027, of which the miscellaneous (tobacco) tax amounted to $215,955,788.

[9] Net profits of the R. J. Reynolds Company for 1928 were $30,172,563, not including a tax refund of $6,000,000 received from the federal government. The net profits for the year were probably in excess of the physical value of the establishment! One dollar invested in a share of stock in this company in 1918 is now worth $25.

Today, with 143 furniture factories, North Carolina ranks fifth in the value of furniture manufactured annually. The following table[10] records the growth of this industry since 1899:

Item	1927	1914	1899
No. of Establishments	143	109	44
Wage Earners	14,821	5,801	1,909
Wages, Salaries	$14,417,590	$1,856,000	$1,023,000
Material Used	27,702,378	4,835,000	725,000
Value of Product	53,551,221	9,335,000	1,547,305
Value Added by Manuf.	25,848,843	4,500,000	822,236

North Carolina manufactures almost exclusively wood household furniture as shown by the following analysis of data released by the Department of Commerce, covering furniture manufacture for the year 1927.

The total value of all furniture manufactured in the United States was $879,000,000. Of this total, $572,000,000 represents the value of wood household furniture, in the manufacture of which North Carolina specializes. The value of wood household furniture manufactured in 1927 by the more important states was as follows:

Rank	State	Total Value
1	New York	$90,877,000
2	Illinois	69,151,000
3	Indiana	66,374,000
4	Michigan	57,569,000
5	*North Carolina*	*50,996,000*
6	Pennsylvania	42,194,000
7	Ohio	23,540,000
8	Virginia	22,967,000
9	California	21,797,000
10	Wisconsin	21,172,000
11	Massachusetts	20,162,000

Bedroom furniture is the chief output of North Carolina, with dining-room furniture second. We manufacture more wood bedroom furniture than any other state, and we also rank first in the manufacture of wood dining-room furniture. We rank fourth in the manufacture of wood kitchen furniture and tenth in the manufacture of wood living-room furniture. The following brief table shows our rank in the production of each type and the value of each type produced in North Carolina during 1927:

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[10] Compiled from various official (government) sources.

RANK	ITEM	VALUE
1	Wood Bedroom	$26,524,000
1	Wood Dining-room	14,404,000
4	Wood Kitchen	1,744,000
10	Wood Living-room	7,643,000
	Other	681,000
5	Total	50,996,000

Thus, in addition to wood household furniture, the state manufactures about $2,500,000 worth of other types of furniture each year.[11] In the manufacture of all types of furniture combined North Carolina ranks fifth, the same position held as a producer of wood household furniture.

Raw Materials. In the beginning of the industry in North Carolina and the South generally, hardwood lumber could be obtained at the very doors of the factories. Today the materials used in the manufacture of furniture are drawn from all parts of the world—the hardwoods from the Mississippi Valley, mahogany from Africa, cane and rattan from Singapore and the Philippines, the gums for varnishes and finishing materials from the Orient, mosses from Florida and Canada, tow for upholstering from the Northwest, burlap from India, hardware fabric from New England, and plate glass from the Pittsburgh district.

Markets. In the distribution of North Carolina and southern-made furniture, less than one-half is sold at home. The distribution is nationwide, the East and the West being large consumers. In addition to the domestic markets, considerable southern furniture is sold in Cuba, Canada, and Mexico.

For many years the southern manufacturers realized that the industry was being handicapped by the necessity of marketing their products at the expositions held semiannually in New York, Chicago, and Grand Rapids. This situation eventually resulted in the erection of the Southern Furniture Exposition Building at High Point, until recently the largest such building in the world,[12] at a total cost of $1,200,000. The semiannual furniture shows, held in January and July, are visited by hundreds of buyers throughout the nation who purchase their stocks at these periods. Approximately 1,500 furniture dealers attend each show, and a large number visit the market between seasons. High Point is today recognized as one of the leading furniture markets, as all classes and kinds of southern-made furniture are exhibited.

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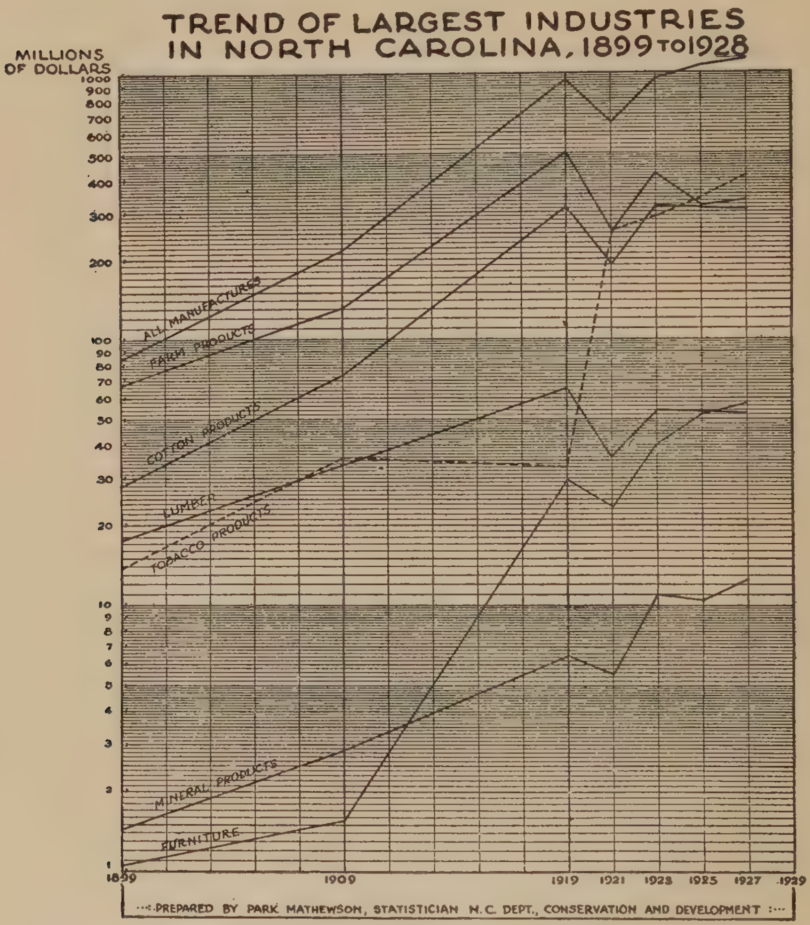
[11] Total value of output $53,551,221.

[12] The Furniture Mart, Chicago, now ranks first in size.



The growth of our furniture industry has been steady, due to progressive policies pursued by a small group of far-seeing men. An intensive study of manufacturing processes, accompanied by a vast amount of research work, a study of designing, a careful gauging of public tastes, and the quantity production of goods through native-born white labor at low cost, have been contributing factors of the continued growth of the industry.

Like the cotton manufacturing industry, the trend of furniture manufacture is southward. Continued progress such as North Carolina has experienced in this industry during the last two decades will in a few years cause this state to rank first in the manufacture of furniture. We passed by two states[13] between 1925 and 1927.

Miscellaneous Industries

Not much is heard of the miscellaneous industries of the state. Nearly everyone who speaks or writes about our industries considers the job completed when he has told about tobacco, textiles, and furniture. Yet miscellaneous industries are a very important part of our economic structure. They support a large population and contribute far more to the income of the state than is generally recognized.

The leading industries under this heading are lumber, including planing mill products, fertilizer, flour and meal, cottonseed oil cake and meal, leather, car construction and repair (steam railway cars), and printing and publishing. In addition to industries classified under the above headings, there are nearly 1,000 other industries reported in the Census of 1927. The following table[14] gives the consolidated figures for reported industries other than tobacco, textiles, and furniture for the year 1927:

MISCELLANEOUS INDUSTRIES[15]

No. of Establishments	2,249
Wage Earners	50,439
Wages Paid	$ 44,705,000
Raw Materials Used	152,783,000
Value of Output	262,354,000
Value Added by Manufacture	109,571,000

The importance of these miscellaneous industries in the economic life of the state can be indicated by calling attention to the fact that the value of output is in excess of $262,000,000, or considerably more than the value of all crops produced in the state in 1924 as reported by the 1925 Census of Agriculture.

Industry and Agriculture

North Carolina is looked upon as about the most prosperous state in the South. It is believed that the chief explanation lies in our supremacy as an industrial state. Excessive ruralism and a lack of balance between agriculture and industry are not good for a state. Farmers are severely handicapped where there are too many farmers and too few non-farmer consumers. Industrial and urban development has benefited agriculture, as all thoughtful people in the state agree.

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[13] Pennsylvania and Wisconsin.

[14] For details by groups see the table entitled North Carolina Census of Manufactures for 1927 appearing at the end of this chapter.

[15] This table does not include industries whose value of output is less than $5,000 annually. The 1919 Census, including all industries, listed 5,999. The 1927 Census lists only 3,008.

But what it is desired to stress at this point is the importance of industry *per se* as an economic foundation for a state. Industry gives North Carolina the bulk of her income and the bulk of her spending power. The following table is offered as throwing some light on the importance of industry in the economic life of North Carolina. It is strictly an analysis of wealth production. Its significance may best be understood if one attempts to contemplate North Carolina without any industry at all, but simply as an agricultural state. And there are states that are almost strictly farm states.

INDUSTRY AND AGRICULTURE COMPARED

	Employees	Wages	Value of Output	Output of Worker
Textiles	123,432	$ 86,145,015	$ 425,437,522	$ 3,444
Tobacco	15,976	12,545,075	413,274,114	25,930
Furniture	14,821	14,417,590	53,551,221	3,610
Miscellaneous	50,438	45,179,527	262,354,779	5,616
Total	204,767	158,287,197	1,154,617,636	5,640
Agriculture	513,000*	....	453,000,000**	902

* A farm averages 1.8 gainfully employed adult workers, not counting child labor, etc.

** Year 1926, the best year since 1919.

Although the bulk of our people still live on farms, the bulk of our wealth is produced by our factories. The wealth turned out annually by our factories is more than two and a half times the wealth produced by our farms. The average person gainfully employed in industry produces six times as much wealth as the average person gainfully employed in agriculture. There is probably a larger per cent of new wealth in a dollar's worth of industrial output than in a dollar's worth of farm produce.

North Carolina is still an important agricultural state, but in the production of wealth we are primarily an industrial state. This refers to net as well as to gross production.

Why Industry Has Prospered

In concluding this chapter it seems necessary briefly to state some of the reasons for the rise of North Carolina as an industrial state.[16]

1. *Water Power.* Without cheap developed water power North Carolina could not be an important industrial state. In this the state ranks second only to New York in the eastern part of the United States. Coal and oil are available in near-by states, and much fuel is converted into power, but most of our power is supplied by our streams. Our industries and water power resources have had a parallel development. Their fortunes have been and remain interrelated.

2. *Raw Materials and Subsidiary Industries.* The leading industries of the state find an abundance of raw materials at their doors. Cotton, tobacco, and lumber are produced in great abundance, not only in the state but in adjoining states. There is an economic advantage in having an abundance of near-by raw materials. It is cheaper, other things being equal, to process the raw material where it is produced, and ship the more valuable finished product.

North Carolina has within its boundaries or on its flanks important subsidiary industries. When a country grows and produces a leading raw material of industry, the types of subsidiary industry which tend to gather around it are three in number:

(a) Chemical industries supplying the ingredients of crop production.

(b) Mechanical industries supplying the machinery of the manufacturing processes.

(c) By-product industries utilizing the by-products of the main product or products.

In North Carolina these are represented by the manufacture of:

(a) Commercial fertilizer.
(b) Textile machinery (in its infancy).
(c) Cottonseed oil and cake.[17]

3. *Cheap and Adaptable Labor.* North Carolina has a labor supply, plentiful, adequate, cheap, and adaptable. The cotton mills and furniture factories have been chiefly supplied from the mountain country and from the white farm tenant classes of the Piedmont region. Tobacco factories employ the Negro mainly. The white labor is native born (usually referred to as "pure Anglo-Saxon stock"), and the Negro labor is also of native birth. There are practically no immigrants in North Carolina.[18] Labor troubles have been few until 1929 but there

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[16] All of these factors are treated in more detail in chapters that cover these points.

[17] *News Letter,* vol. XII, no. 8, containing a reprint of "The New Industrial Revolution," by C. R. Fay.

[18] 99.7 per cent of North Carolina's population is of American birth and very largely born in the state.

is no doubt that labor ultimately will organize and that there will be many strikes. It is true, however, that our natives are individualistic and not given to unionism. Not more than 5 per cent of our textile workers belong to labor unions. This is the item most often referred to by New England textile mill owners who see their business dwindling.

Labor has been cheap (a fact, for good or bad), much cheaper than in the North and East, and has so far been willing to work longer hours than labor there. Wages will rise, and should rise, and working hours and conditions will improve, but it remains a fact that cheap labor of the past and present has had much to do with our industrial growth.

4. *Cheap Living Conditions.* Low wages do not necessarily mean underpaid labor. Living costs are much lower in North Carolina and throughout the South than elsewhere in the nation. The climate is mild, resulting in savings on fuel, clothing, and cost of homes and buildings. Food is cheaper due to the mild climate and long growing season. In North Carolina homes are usually supplied to textile workers at a nominal rental charge. The Duke Power Company[19] sets forth somewhat the same reasons as to why more industries should come to Piedmont Carolina:

> Housing costs less, and results in lower rents and lower cost of owning a home. Land, building materials and building labor all are relatively less.
>
> Food costs less. For every worker in industry, three are still on farms, available for factory employment. A majority of the factory workmen have their own garden patches.
>
> Clothing and heating both cost less, due to the fact that winters here are 15 degrees to 25 degrees warmer.
>
> Health is better here, Piedmont Carolinas having one of the lowest death rates in the nation. There are fewer doctors' bills.
>
> Labor turnover is negligible, and—of utmost importance—productiveness per individual worker is high. There is no city-bred unrest. Being 99 per cent native-born, there are no un-American ideas of shirking on the job or restriction of output.
>
> Instead, there is steadfast loyalty, ready, willing intelligence, and a full measure of initiative and ambition to get ahead.
>
> Those facts, readily verified, reflect themselves in lower labor costs, lower overhead, and greatly increased profits.
>
> Manufacturers, learning of these savings, have located here at the rate of one every five days for several years. Now the rate is one every four days. And still there is room for all.

Of course this company's picture of our docile, happy labor is not, in the light of recent events, without a certain irony.

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[19] *The Review of Reviews*, Jan. 1929.

NORTH CAROLINA CENSUS OF MANUFACTURES FOR 1927

Industry	No. Estab.	Wage Earners	Wages	Raw Material, Fuel, and Power	Total Value of Products	Value Added by Manuf.
Total 1927 (All Industries)	3,008	204,767	$158,287,197	$562,086,283	$1,154,617,636	$592,531,353
Total 1925 (All Industries)	2,614	182,234	134,237,097	550,706,965	1,050,434,117	499,727,152
All Textiles and Products	595	123,532	86,145,015	256,887,676	425,437,522	168,549,846
Clothing, Men's	13	1,547	914,305	2,977,296	4,706,065	1,728,769
Cordage and Twine	9	1,456	915,094	4,113,524	6,520,058	2,406,534
Cotton Goods	374	95,809	66,122,495	184,758,069	310,801,860	126,043,791
Cotton Small Goods	9	161	171,694	420,960	856,515	435,555
Dyeing and Finishing	17	2,548	2,229,866	13,575,705	19,402,448	5,826,743
Gloves and Mittens	4	219	91,691	393,902	612,233	218,331
Knit Goods	129	17,430	11,963,107	37,372,944	61,370,220	23,997,276
Woolen Goods	7	1,158	1,028,981	3,320,912	5,510,039	2,189,127
Tobacco Products	21	15,976	12,545,075	124,712,918	413,274,114	288,561,196
Furniture	143	14,821	14,417,590	27,702,378	53,551,221	25,848,843
Lumber—Including Planing Mills	756	21,366	15,476,466	25,533,624	53,189,652	27,655,758
Fertilizer	84	1,842	1,532,364	13,962,784	18,293,687	4,330,903
Flour and Meal	153	562	519,616	15,046,938	17,847,452	2,800,514
Cotton Seed Oil, Cake and Meal	53	1,418	1,067,922	13,962,245	17,612,879	3,650,634
Leather, Tanned and Cured	11	1,342	1,237,243	12,128,432	16,405,354	4,276,922
Car Construction and Repair (Steam Railways)	16	4,611	6,369,417	7,209,774	14,447,433	7,237,659
Printing and Publishing	228	1,753	2,836,028	2,979,666	12,259,226	9,279,560
All Other	948	17,544	16,140,461	61,959,848	112,299,096	50,339,248

5. *Poor Soils in Piedmont Area.* The Piedmont region, where industry is located mainly, has a soil which is less fertile than that farther east. "It is one of the paradoxes of economic growth that regions of quick fertility, because they are easy and warm, carry less industry than those which must be industrial if they are to grow at all."[20]

6. *Leadership.* Undoubtedly an important explanation of our industrial development lies in the fact that the Piedmont region was settled in large part by Germans who came to North Carolina from Pennsylvania. Winston-Salem, the chief Moravian settlement, is by far the most important industrial center in the state. Throughout the Piedmont country many of the early industries were begun by these original German settlers and their descendants. Today a large number of our industries are officered by people of German and Irish descent.

It is thus seen that North Carolina is peculiarly suited to engage in the particular industries which she has developed. It is just as natural for the textile, tobacco, and furniture industries to develop in North Carolina as for the steel industry to develop in Pittsburgh or Birmingham. The indications are that North Carolina will retain her position of leadership in the tobacco industry; will become more firmly entrenched as the nation's leading textile state; will become more prominent as a furniture manufacturing state; and will always hold high rank in lumber production. Many miscellaneous industries are prospering, and these will always have a big place in the economic life of the state.

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[20] C. R. Fay gives this as the first reason for industrial development in Piedmont North Carolina. See *News Letter,* vol. XII, no. 8.

CHAPTER IX

FINANCIAL INSTITUTIONS

In accumulated wealth North Carolina does not make a very creditable showing. Production of wealth is one thing. Retention is quite another. The state does much better in production than in retention. Somehow or other we fail to hold on to a fair share of the wealth produced in the state. The accumulated capital of the state has increased a great deal within recent years, but the volume of accumulated wealth has not kept pace with increased wealth production. The period between the Civil War and the World War was one of slow growth for all of our financial institutions. The assets of our financial institutions have approximately doubled during the last decade.

Banks

At the close of the Civil War, and for some years afterwards, there was very little cash in North Carolina. "On June 23, 1866, the charters of all North Carolina State Banks were repealed, so far as any requirement whatsoever concerning the keeping of special reserve."[1] The federal government had rendered banks practically insolvent by taxing state bank circulation 10 per cent. The legislature thought it wise to pass an act enabling the banks then operating in the state to close their doors. Conditions were so bad that an act was passed "allowing certain banks to take security for loans, liens on crops even before they were planted, and on the prospective products of mines and manufacturing operations."[2] Thus was born the crop-lien system, once a crutch, but still largely used to finance the production of cash crops by our great mass of farm tenants.

At one time just following the Civil War there were only five banks in the state, with a combined capital of $395,000. In those days barter and trade were the custom in the transaction of business, and as far as possible, an honest day's work was the standard of value. North Carolina had not sufficiently recovered to feel the panic of 1873. However, the depression of 1893 was severely felt in the state. The shrinkage in bank deposits, due to bad business and bank failures, was not overcome until 1898.

During the quarter of a century preceding 1900 the banks of the state increased from 5 to 120, and bank resources from $395,000 to $32,552,894. One banking institution in the state today has bank resources approximately twice as large as the entire state had thirty years ago.

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[1] F. H. Fries, "Finance in North Carolina," *The Wachovia,* Dec., 1926.

[2] *Ibid.*

The period from 1900 to the close of the World War was one of accelerated growth in financial resources, especially the four years of the World War. The decade following the close of the World War has brought an enormous growth in our financial resources, as shown by the table below:

BANKING PROGRESS, 1918-1928

ITEM	1918	1928	PER CENT INCREASE
No. Banks	543	511	—5.9
Capital	$ 32,388,000	$ 60,976,000	88.3
Resources	288,187,000	534,047,000	85.2
Deposits	212,786,000	369,714,000	73.8
Subject to Check	131,754,000	178,536,000	27.9
Time Deposits	77,372,000	145,314,000	87.9

It will be noticed that time deposits have increased much more rapidly than demand deposits. This is the result of personal forehandedness rather than of business inactivity. Our people are building up a reserve fund, which is a wholesome and prudent thing for them to do.

A good idea of the progress the state has made in banking may be had from the following table, which covers only bank resources:

BANK RESOURCES IN NORTH CAROLINA, 1914-1928

YEAR	BANK RESOURCES		TOTAL	AGGREGATE BANK RES. PER INHAB.
	National	State		
1914	$ 71,331,000	$ 81,783,436	$153,114,436	$ 64.90
1915	68,567,000	92,384,895	160,915,895	67.17
1916	73,104,000	120,046,244	193,150,244	79.42
1917	93,495,000	156,480,401	249,975,401	101.27
1918	116,944,000	189,632,416	306,576,416	143.96
1919	151,525,000	298,540,408	450,065,408	177.12
1920	183,810,000	271,775,749	455,585,749	176.77
1921	163,937,000	243,046,259	406,983,259	155.71
1922	179,685,000	264,623,024	444,308,024	167.66
1923	175,122,000	298,995,609	474,117,609	176.49
1924	178,798,000	280,618,841	459,416,841	170.40
1925	192,419,000	287,746,807	488,514,207	181.75
1928	202,940,000	331,107,000	534,047,000	184.00

The important point is not how much progress in the absolute has banking in North Carolina made within recent years, but how progress of banking compares with that of commerce, industry, and agriculture.

A statistical comparison shows that in general banking has not kept pace with progress in other lines.

How North Carolina Ranks in Banking. On any fair basis of comparison North Carolina holds a low position as a banking state. In 1927 there were only five states that had smaller per inhabitant bank resources, the average for North Carolina being $174, compared with a national average of $574. There were twenty-six states with larger total bank resources. Tables showing the rank of the states in per inhabitant bank resources for several different years all give North Carolina forty-second or forty-third position. The per inhabitant bank resources for the United States are more than three times the average for North Carolina. The average for Virginia is nearly a hundred dollars per inhabitant above the average for this state. Many of the larger banking accounts of North Carolina are carried in Virginia, and some of the considerable ones in New York and other places. There is no large city in North Carolina. The largest bank in the state has found it necessary to establish branch banks in order to continue to grow.

According to the latest tabulated data[3] there are only three counties in the state with per inhabitant bank resources above the average for the United States, and only eighteen counties that rank above the state average. In other words, the bank resources are grouped in relatively few counties.

The counties that lead are of two classes mainly: (1) The urban-industrial counties such as Mecklenburg, Forsyth, Durham, Guilford, etc., and (2) the great cash-crop counties of the Coastal Plain. A third group consists of a few counties like New Hanover, Pasquotank, Craven, Moore, and others which are centers of trade and banking for the surrounding rural counties. Usually these are counties with superior transportation facilities, and thus nucleating centers of population and trade. Counties which lack industries and in which agriculture is more or less self-sufficing make few calls on banks for loans and discounts, and consequently the bank resources of such counties are extremely small.

There are twenty counties whose bank resources fall below fifty dollars per inhabitant. There are fifty-six counties whose bank resources fall below one hundred dollars per inhabitant. For the most part these are the remote rural counties of the Tidewater and Mountain areas and a few rural Piedmont and Coastal Plain counties. However, a few very important agricultural counties are found in the group, notably, Robeson, Johnston, Nash, Harnett, Rowan, Sampson, and Greene. Two counties, Camden and Tyrrell, have no bank within their borders.

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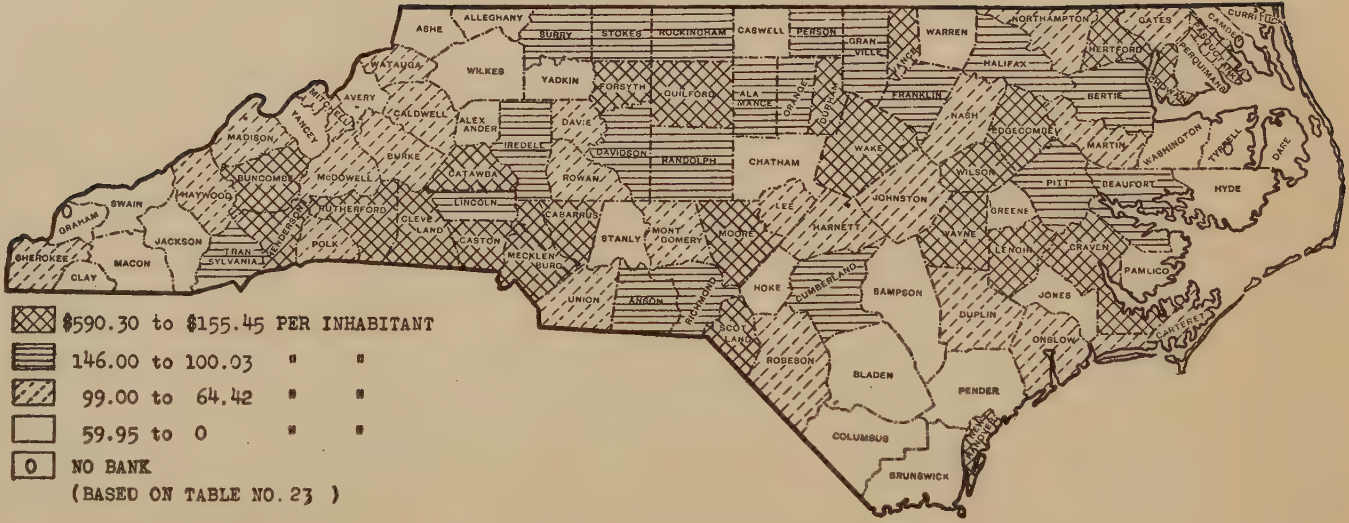
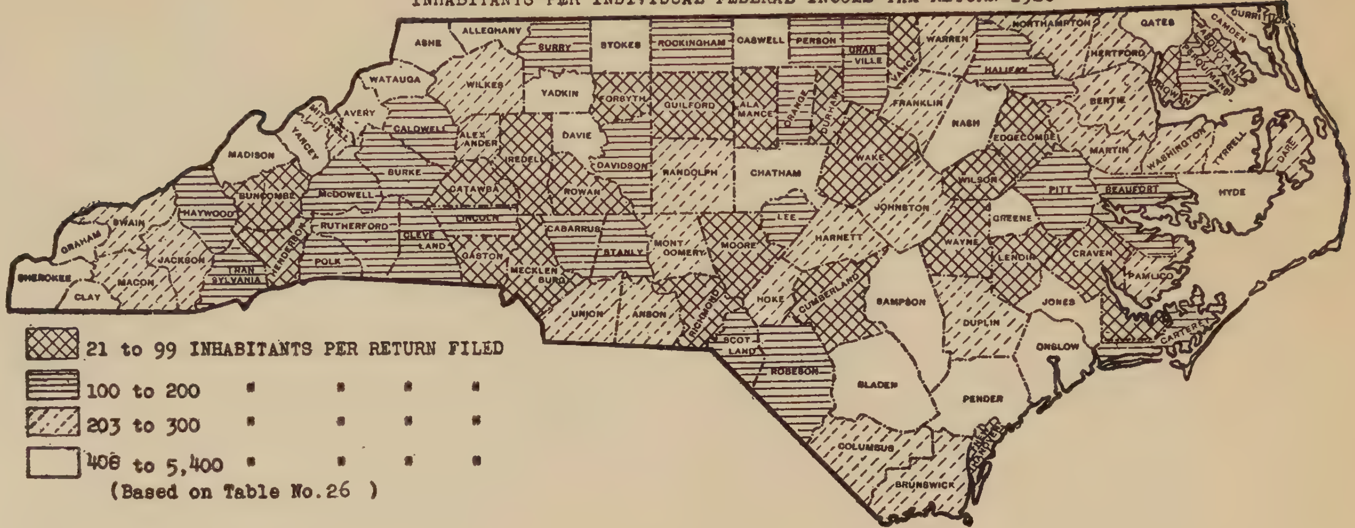
[3] For the year 1925. See *News Letter,* vol. XII, no. 26.

NORTH CAROLINA

BANK RESOURCES PER INHABITANT YEAR 1925


▩ $590.30 to $155.45 PER INHABITANT
▤ 146.00 to 100.03 " "
▨ 99.00 to 64.42 " "
☐ 59.95 to 0 " "
0 NO BANK
(BASED ON TABLE NO. 23)
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
VANCE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
HERTFORD
CHOWAN
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
HALIFAX
BERTIE
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MITCHELL
AVERY
CALDWELL
ALEXANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
MADISON
YANCEY
BURKE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
HAYWOOD
SWAIN
GRAHAM
CHEROKEE
CLAY
MACON
JACKSON
TRANSYLVANIA
HENDERSON
POLK
RUTHERFORD
CLEVELAND
LINCOLN
GASTON
MECKLENBURG
CABARRUS
STANLY
MONTGOMERY
LEE
MOORE
HARNETT
JOHNSTON
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
UNION
ANSON
RICHMOND
SCOTLAND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
COLUMBUS
BRUNSWICK
NEW HANOVER

INHABITANTS PER INDIVIDUAL FEDERAL INCOME TAX RETURN 1926


ASHE
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VANCE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
BERTIE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MITCHELL
AVERY
YANCEY
MADISON
CALDWELL
ALEX ANDER
IREDELL
DAVIE
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BURKE
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
LEE
JOHNSTON
GREENE
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
LINCOLN
CABARRUS
HARNETT
WAYNE
LENOIR
CRAVEN
CLEVE LAND
MONT GOMERY
MOORE
STANLY
JACKSON
HENDERSON
TRAN SYLVANIA
POLK
GASTON
MECKLEN BURG
CHEROKEE
MACON
CLAY
PAMLICO
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
JONES
DUPLIN
ONSLOW
CARTERET
SCOT LAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
21 to 99 INHABITANTS PER RETURN FILED
100 to 200 " " " "
203 to 300 " " " "
408 to 5,400 " " " "
(Based on Table No.26)

North Carolina has 2½ per cent of the nation's population, but only eight-tenths of 1 per cent of the nation's bank resources. Our share of the nation's bank resources is too small. Since our banks are unable to meet the demands made upon them for loans and discounts, we are forced to call upon other states to supply us with funds. The state has suddenly become very important industrially and agriculturally, and it is expected that in a short time we will have erected financial institutions adequate to care for the state banking needs. The world of commerce is founded on credit, and banks are credit factories. Bank resources are evidence and result of accumulated wealth. They never precede demand but usually arise to meet demands.

Bank Savings. The volume of bank savings is an index of thrift and of accumulated wealth. On the basis of bank savings per inhabitant North Carolina ranks fortieth, the amount being $57.[4] The average for the United States is $237, or more than four times the average for North Carolina. Massachusetts ranks first with an average of $542 of bank savings per inhabitant.

However, in this instance as in almost every other one, the state has made rapid improvement within recent years. From 1918 to 1928 the per inhabitant bank savings increased 148 per cent, and only seven states did better.

It is not to be expected that North Carolina will ever rank high in bank savings. Obstacles to a high rank are many, among them being a large rural population ratio, a large number and ratio of unstable farm tenants, and a large Negro population. Such factors are not conducive to wealth accumulation.

In the matter of postal savings North Carolina makes the poorest showing of any state, the per inhabitant average being just two cents.[5] The large rural and small town population of the state does not seem to look upon this form of savings as an attractive way to accumulate a competence, while the negligible foreign population also helps to explain the almost complete absence of it in North Carolina.

BUILDING AND LOAN ASSOCIATIONS

For a rural state North Carolina makes an excellent showing in building and loan associations. In no other financial concern does it rank so well. Data for the year 1927 show that the building and loan association assets for the state amounted to nearly $86,000,000.[6] The per inhabitant assets amounted to $29.58, and only nineteen states ranked ahead of North Carolina. Around 10,000 new homes, at a total cost of more than $25,000,000, are erected in the state each year, financed through the building and loan plan. The outstanding loans total around $90,000,000 for the year 1928. There are more than 108,000 stockholders with approximately 2,000,000 shares of stock[7] in these associations. The period of most rapid growth of building and loan associations has been the last decade, during which the assets have risen from $23,453,000 (1919) to the present amount of around $100,000,000.

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[4] *News Letter*, vol. XV, no. 9. Covers year 1928.

[5] *Ibid.*, vol. X, no. 47.

[6] For rank of states see *Ibid.*, vol. XIV, no. 5.

The building and loan idea is strictly American and is the best yet devised for promoting home ownership among urban people. It is through this agency that the urban tenant rate of North Carolina towns and cities is declining.

Our statutes provide that farmers may organize land and loan associations,[8] operated on a plan similar to that of building and loan associations, but so far the farmers have not made any use of this scheme. Such associations could be promoted in farm areas having a steady cash income, but such areas are very exceptional in this state.

The following table[9] shows the growth of building and loan associations in North Carolina within recent years:

	1919	1921	1924	1928
No. Associations Reporting	141	186	247	232
No. White Shareholders	45,476	53,324	71,301	92,169
No. Colored Shareholders	7,645	7,959	10,173	15,885
Total Assets	$23,452,771	$37,666,451	$70,248,910	$94,901,834
Shares of Stock in Force	616,001	970,795	1,516,630	1,901,220
Shares Subscribed During Year	283,120	311,930	457,724	539,965*
Average Interest Rate Earned	.055	.05365	.05928	.06297*
Average Expense Ratio to Collections	.0391	.03617	.03079	.03285*

* Year ending Dec. 31, 1927.

INSURANCE

Very little is known of the history of the early North Carolina insurance companies. The first company to be chartered was "The Mutual Insurance Society against Fire," incorporated in 1803. The first life insurance company seems to have been the North Carolina Mutual Life Insurance Company, chartered in 1849. The oldest North Carolina company which is still doing business is the North Carolina Home, incorporated in 1868. There are only four other North Carolina companies which received their charters prior to 1900.

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[7] A matured share of stock is worth $100. By paying 25 cents a week a share of stock matures in about six and a half years upon an average. Stock is non-taxable. Some companies earn as high as eight per cent on the stock. Few bona fide companies have ever failed in North Carolina.

[8] *Consolidated Statutes,* "Land and Loan Associations," Sub-chapter 2, Sections 5204-5207.

[9] Based on official reports of the Insurance Commissioner.

All life insurance companies except one have come into the field since 1900. The Pilot Life Insurance Company of Greensboro began business in 1903, the Security Life and Annuity of Greensboro in 1901. This company was later merged with the Jefferson Standard Life Insurance Company, which was organized in 1907, and the Greensboro Life Insurance Company, which was organized in 1905, to form the greater Jefferson Standard, today the strongest company in the state and perhaps in the South. Its admitted assets were more than $40,000,000 in 1928.

On January 1, 1901, there were twenty-eight life insurance companies doing business in North Carolina, all of them foreign except one. They had outstanding in North Carolina 68,726 policies for a total of $54,147,836 insurance. On January 1, 1928, there were ninety companies doing business in North Carolina, fourteen of which were home companies. At the close of the year 1928 these companies had outstanding in the state 1,857,995 policies for a total of $1,249,357,353 insurance. This means that there are 65 per cent as many life insurance policies as there are people in the state, while the insurance in force is equivalent to more than one-third the wealth listed for taxation.

The fourteen North Carolina life insurance companies had admitted assets of more than $66,000,000 at the beginning of 1928, against less than $1,000,000 for the home companies operating in 1903. More than one-half of all the life insurance business now done in North Carolina is done by home companies. Life insurance has come to be one of the major businesses of the state and one of the considerable elements in the financial structure. The fact that there are strong home companies operating in the state probably explains why North Carolinians have taken so strongly to life insurance.

The North Carolina Mutual Insurance Company, with the home office in Durham, is the oldest and largest life insurance company in the world owned, managed, and controlled by Negroes. This company began business on April 1, 1899, its total collections amounting to $640. Its assets in 1927 were more than $3,000,000. Its net premium receipts are around $2,000,000 a year. There are more than 250,000 policyholders, distributed mainly from Maryland to Mississippi.

Fire Insurance. In the field of fire and other risk insurance, the home companies are important, but not relatively as important as in the field of life insurance. The state-chartered fire (mutual and stock) insurance companies have increased from five in 1900 to twenty-five in 1928. Premium incomes have increased from $162,165 to nearly $5,000,000. Other gains have been in proportion. Around one-sixth to one-seventh of all fire insurance business is carried with home companies. Around 40 per cent of the total business done by the home companies is done in North Carolina.

The total amount of insurance carried on property in the state is nearly $2,000,000,000, or around two-thirds of the total assessed value of all property, real and personal. Property is insured against fire to the amount of $1,250,000,000, which is probably more than all the buildings of the state are listed for on the tax books. The people of the state pay out more than $14,000,000 a year for protection to property. The net losses paid by the insurance companies amounted to $6,661,066 for 1927.

The following tables[10] give the essential facts about the insurance business and its growth in North Carolina.

GROWTH OF N. C. LIFE INSURANCE COMPANIES

Year	Premiums Collected	Total Income	Paid to Policy Holders	Total Disbursements	Total Admitted Assets
1903	$ 106,697	$ 250,767	$ 33,793	$ 177,084	$ 899,080
1908	1,207,751	1,599,296	231,968	859,836	3,020,448
1913	2,584,493	2,968,013	914,667	1,899,337	6,653,967
1918	5,648,143	6,413,444	2,269,339	4,876,321	13,724,487
1923	13,834,888	16,139,057	4,389,051	8,508,906	34,897,067
1927	19,728,904	24,111,633	8,662,889	17,654,525	62,117,325

GROWTH OF N. C. FIRE INSURANCE COMPANIES

Year	Premiums Collected	Total Income	Losses Paid	Total Disbursements	Admitted Assets
1903	$ 558,823	$ 787,074	$ 275,210	$ 625,766	$ 2,902,669
1908	1,809,940	2,022,999	1,079,936	1,930,748	3,579,843
1913	1,100,868	1,279,332	643,381	1,242,703	3,427,790
1918	1,670,566	1,957,555	485,195	1,551,968	4,406,034
1923	3,003,768	4,038,953	1,281,540	4,186,342	6,906,697
1927	4,983,953	5,726,379	2,512,271	5,035,311	11,103,849

In addition to the resources of the above financial institutions, there are certain miscellaneous financial resources such as federal farm loan associations, a joint stock land bank, and an agricultural credit corpora-

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[10] Compiled from biennial reports of the State Insurance Commissioner.

INSURANCE BUSINESS DONE IN NORTH CAROLINA FOR YEAR ENDING DEC. 31, 1927

Types	Net Risks Written	Net Premiums Received	Net Losses Paid
BUSINESS COMPANIES			
(fire, motor vehicle, sprinkler leakage, etc.)			
N. C. Companies	$ 121,168,817	$ 1,958,173	$ 1,001,402
Stock Cos. of other states	1,352,476,812	9,056,100	4,226,410
Cos. of Foreign Countries	254,140,165	2,106,612	1,010,922
Mutual Fire Cos. of other states	114,184,281	553,357	335,287
Total	$1,841,970,075	$13,674,242	$ 6,574,021

	Insurance Written 1927	Premiums Received 1927	Insurance in Force Dec. 31, 1927	No. Policies in Force
LIFE INSURANCE				
Ordinary business N. C. Cos.	$ 45,351,709	$ 7,354,912	$ 211,452,193	100,264
Ordinary business Cos. other states	133,737,620	21,369,272	710,288,845	310,290
Industrial business N. C. Cos.	52,858,980	1,731,614	64,780,322	594,141
Industrial business Cos. of other states	45,391,775	4,581,831	124,818,599	759,103
Group business	23,745,055	382,477	40,353,906	312
Total	$301,085,139	$35,420,106	$1,151,693,865	1,764,100

	Assets	Certificates in Force Dec. 31, 1927		Losses Paid During Year
		Number	Amount	
MUTUAL LIFE ASSESSMENT ASSOCIATION	$12,381,167	40,182	$1,469,801	$ 30,272

	Assets	Total Income	Premiums Received	Losses Paid During Year
N. C. FRATERNAL ORDERS*	$912,220	$998,653	$900,556	$708,489

* No separate report on N. C. business of fraternal orders of other states.

tion, all operating under the supervision of the Federal Farm Loan Board. There are also around sixty credit unions operating under the Credit Union Act passed by the state legislature in 1915.[11] The North

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[11] *Public Laws* 1915, chap. 115.

Carolina Credit Union Law has served as the pattern for similar laws in other states. Due to the fact that North Carolinians are individualistic, and not prone to engage in group activities, credit unions have not prospered greatly. Largely as a blind to camouflage the "union" idea, the 1925[12] session of the legislature changed the title of the banks from Credit Unions to Savings and Loan Associations. Since 1925 about two dozen associations have been organized in the towns and cities of the state, largely among postoffice employees.

From the above survey it is apparent that North Carolina has made great progress in developing her financial resources during the last decade or two. It is equally clear that she still ranks low, compared with other states, in financial resources. It is true that in the field of insurance the state makes a very creditable showing also in building and loan development, but as a banking state our rank is inexplicably low.

Evidence of lack of accumulated wealth is shown by the fact that it is almost impossible to sell state and local bonds to North Carolinians. Even when bonds have been split into small denominations, it has been impossible to induce home people to buy them. This is evidence that there is not a surplus of accumulated cash wealth lying about in the state. What capital we possess is required to build up our productive enterprises. One result, then, of the lack of accumulated capital is that state and local bonds have to find a market outside the state, necessitating the annual export of nearly $30,000,000 in interest alone.

With the strides that the state has made as a producer of wealth, it is a reasonable hope that we will shortly begin to show greater evidences of ability to hold on to a larger share of the wealth we produce. The recent period of great expansion in production is probably the forerunner of a time when we will be self-financing. We need to become more interested in how to retain a fair share of the wealth we produce. This is especially true of the great cash crop belt of eastern North Carolina.

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[12] *Public Laws* 1925, chap. 73.

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CHAPTER X

TRANSPORTATION AND COMMUNICATION

Highways and Motor Cars

When transportation is mentioned in North Carolina one immediately thinks of highways. The greatest single achievement the state has to its credit is its highway system. The grand way in which we initiated that system surprised us no less than it did those outside the state. Many people are still asking how it happened that a state with a long record of opposition to taxes and bonds suddenly went bond-mad and almost overnight accumulated next to the largest state bonded debt in the United States, largely for the purpose of building modern highways.

The good-roads movement began in North Carolina in 1755, when the General Assembly directed the laying of a road from Hillsboro to a point on the Cape Fear River near Wilmington. In 1849 a plank road was laid between Fayetteville and Salisbury, and in 1852 there were 32 plank roads in the state. These plank roads were the forerunners of the modern hard-surfaced roads movement. During the latter part of the nineteenth century and early twentieth century a fairly large mileage of macadam roads was built. In 1914, the year before the first move toward a state highway system, the improved roads consisted of 1,111 miles of macadam, 592 miles of gravel, 4,313 miles of sand clay, 9 miles of bituminous macadam, and 1¼ miles of concrete. Up to 1915 all road work was directed by county or township officers. Until recently all road tax levies were made by the county commissioners, and the funds were under their control. Within the last few years, where road bonds have been issued, special road commissioners have been appointed.

Anticipating the passage of the federal highway aid act in 1916, Governor Craig in 1915 appointed the first State Highway Commission, giving it an appropriation of $10,000. Due to this limited fund, the Commission could act only in an advisory capacity. Real highway construction may be said to have begun in 1919 with the passage of the highway law, in which fees for automobile licenses were increased sufficiently to provide funds more adequately to meet federal aid funds allotted by the government. During the two years that this Commission functioned, approximately 200 miles of improved highways were completed at a cost of $2,464,000, and 650 miles estimated to cost $9,730,000 were placed under construction. Except for paying a portion of the cost of the work and supervising it, nothing was done by the Commission in the way of maintenance, as this phase of the program was left in the hands of county officials.

Realizing the need for a more extensive road-building plan, and seeing the necessity for a more adequate system of maintenance, certain farsighted citizens of the state began a campaign in 1920 which resulted in the passage by the General Assembly of 1921 of the Doughton-Connor-Bowie Act. The purposes of the law are well expressed in Section 2, which reads as follows:

> The general purposes of this act are for the state to lay out, take over, establish and construct and assume control of approximately 5,500 miles of hard-surfaced and other dependable highways running to all county-seats, and to all principal towns, state parks and principal state institutions, and linking up with state highways of adjoining states and with national highways into national forest reserves by the most practicable routes, with special view of development of agriculture, commercial and natural resources of the state, and for the further purpose of permitting the state to assume control of the state highways, repair, construct and reconstruct and maintain said highways at the expense of the entire state, and to relieve the counties and cities and towns of the state of this burden.

Briefly, the act provides for a State Highway Commission consisting of a chairman from the state at large and of one commissioner from each of the nine construction districts into which the state is divided; all engineering work is in charge of a state highway engineer chosen by the Commission; funds for building and maintaining highways are provided by the issuance of bonds, from motor car license fees, and from a tax on gasoline, originally one cent a gallon, now five cents. In addition to these funds, there is allotted to the state her share of the federal aid funds. The 1921 act provided for the issuance of serial bonds aggregating $50,000,000.

The General Assembly of 1923 increased the fuel tax to three cents per gallon and authorized $15,000,000 additional in bonds. In 1925 a further bond issue of $20,000,000 was authorized, and the gasoline tax was increased to four cents per gallon. In 1927 still another bond issue of $30,000,000 was authorized. The 1929 legislature, upon the advice of the Highway Commission and its retiring chairman, who thought the state had "caught up" with highways, decided to change to a "pay as you go" basis. No bond issue was authorized, but the gasoline tax was raised to five cents, which, together with the license fees, will raise approximately $22,000,000 in 1929.[1] This sum will take care of all interest and amortization payments and leave a large amount for maintenance and for further construction work. Naturally construction will not proceed as rapidly as during the years from 1921 to 1929, during which North Carolina ranked at or near the top in amounts spent annually on highway construction and maintenance.

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[1] Collections for year ending June 30, 1928, with 4c gasoline tax were $18,942,707: from licenses, $9,353,616; gasoline, $9,376,988; title fees, $212,103.

The North Carolina state highway system is now composed of around 7,515 miles, connecting every county seat and principal town in the state with a road serviceable every day in the year. At the beginning of 1929 there were 3,694 miles of pavement, 868 miles of oil-treated sand-clay roads, 1,456 miles of graded, sand-clay, or general surfaced roads, and 740 miles of roads which were graded but not surfaced. Only three states had more miles of hard-surfaced state highways in 1927. The state highway system, originally planned to embrace approximately 5,500 miles, has been extended to 7,515 miles and cares for about 85 per cent of the state's traffic. Gradually such additional mileage as the Commission thinks wise to take over will be taken into the state system.

The state has incurred a bonded debt of $115,000,000 since 1921 for highways alone. During this period approximately $14,000,000 of federal aid has been expended, along with many additional millions from the gasoline and license fees, not needed to meet interest payments and sinking fund requirements. The surplus amounted to $8,000,000 in 1928 and will be much larger with the five-cent gasoline tax. From March 4, 1921, to June 30, 1928, the State Highway Commission had spent $153,546,577 and on the latter date had approximately $14,000,000 available for further use.[2]

The ultimate cost of retirement of this large bond issue should be considered. North Carolina has used the serial plan, the first maturity taking place in 1929 and the last in 1964. The interest rate on the total issue averages 4.25 per cent. The ultimate cost of this financing, assuming that the bonds are not retired earlier than planned, will amount to about $70,000,000 in interest and amortization charges, which is a total cost of $185,000,000, but according to actuarial computations the sinking fund requirements for the longer term serials will be sufficient to retire about half the total issue ten years before the last bonds mature. This will materially decrease the carrying charge and discharge the total debt by 1953, long before the roads themselves have been spent. The state believes it is sound business to build roads with low interest rate bonds and allow its citizens to invest their cash in enterprises that will not only develop the state, but return good dividends. Our highway system could not have been built so quickly on the "pay as you go" basis.

In addition to the state highway system, there are more than 65,000 miles of county highways, or were at the beginning of the year 1927.[3]

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[2] Seventh Biennial Report, State Highway Commission, p. 95.

[3] Annual reports on county highways are issued by the U. S. Bureau of Public Roads, Dept. of Agriculture.

Of the total, 21,421 miles were surfaced. Of the surfaced county roads, 17,846 were sand clay and top soil, 2,680 gravel, 251 bituminous penetrating macadam, 237 water bound macadam, 237 Portland cement concrete, 104 sheet asphalt, 32 vitrified brick, and 24 miles were bituminous concrete. Only seven states in 1925 had a larger total mileage of surfaced county roads. The system of highway building and financing inaugurated by North Carolina in 1921 is now in operation in many states.

Motor Cars. In some states highways seem to be built upon the insistent demand of people who have motor cars to drive. In North Carolina it is more correct to say that we built our highways and then felt compelled to buy motor cars in order to use the good roads. At least it is clear that the presence of good highways stimulates the purchase of motor cars. The state does not rank high in the number of inhabitants per motor car (thirty-seventh), but we have been gaining ground on other states that once stood ahead of us, and we have been adding to our supply of motor cars at rates that have often topped all the states. During the years 1927 and 1928 North Carolina led all the states in per cent increase in motor cars, the increases being more than twice the national average gain. The increase for 1927 over the previous year was 11.8 per cent; 1926, 13.1 per cent; 1925, 12.5 per cent; 1924, 22.4 per cent; 1923, 35.2 per cent; and 1922, 22.8 per cent.[4]

The following table[5] shows the growth of motor cars in North Carolina since 1915:

YEAR (DEC. 31)	NUMBER OF CARS	INHABS. PER CAR
1915	16,410	140.0
1919	109,000	23.0
1920	140,860	18.4
1921	148,627	17.6
1922	182,555	14.5
1923	248,414	10.9
1924	302,232	8.9
1925	340,287	7.9
1926	385,047	7.4
1927	430,499	6.8
1928	464,373	6.0

The 1929 state legislature claimed that the people were so bad off financially that they could not pay their taxes. The people were talking hard times and the absolute necessity for tax economy and tax reduction;

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[4] Based on figures issued annually by the National Automobile Chamber of Commerce, arranged and published in the *News Letter.*

[5] *Ibid.*

yet these same people bought nearly twice as many motor cars during January and February as they bought during the same months of 1928, when the state led the nation in increase in motor cars! This appears to be evidence that good roads stimulate the purchase of motor cars.

At the close of 1928 there was a motor car for approximately every six inhabitants in the state. Remembering that the state ranks thirty-seventh in inhabitants per motor car, and the fact that we are buying new cars at a very rapid rate, it is evident that we lack a great deal of having reached the saturation point in the ownership and operation of motor vehicles. Not every family will own a car, but there will soon be a state average of one motor car per family. Several counties already average better than a motor car to the family, while the poorest ranking county in the state averages a motor car to every five families.

The state is now completely covered with motor bus and truck lines. The State Motor Bus Commissioner says that North Carolina has one of the most complete and comprehensive motor transportation systems in the United States.

RAILROADS

In some respects North Carolina is very well provided with railway facilities. On the basis of miles of line per 100 square miles of area the state averages 11.27,[6] which is approximately the average for all the states. The great central part of the state is well provided with north and south trunk line railroads, as well as with short-haul lines. The extreme eastern and western sections of the state have very poor railway transportation facilities. The greatest handicap that North Carolina labors under in the matter of transportation facilities is the lack of an east and west trunk line railroad.

According to *Statistics of Railways,*[7] North Carolina has a total of 5,223 miles of railroads, distributed as follows:

TYPES	MILES
Class I steam railways	3,069.40
Class II steam railways	678.63
Class III steam railways	409.37
Owned by non-operating companies	598.61
Owned by companies not filing report	467.09
All classes, official	4,993.98
Unofficial	229.12
Total	5,223.10
Per cent of total mileage of U. S.	2.10
Total value, 1927	$286,084,912.00

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[6] *News Letter,* vol. VI, no. 35.

[7] For 1927, p. xxiii.

The following table[8] shows at a glance the growth of railroads in the state from 1850 through 1926:

YEAR	MILEAGE
1850	248
1860	937
1870	1,178
1880	1,486
1890	3,001
1900	3,831
1910	4,932
1920	5,522
1926	5,308

The chief railroads of the state are the Southern Railway with 1,397 miles of main line, Atlantic Coast Line with 950 miles, Norfolk-Southern with 776 miles, and Seaboard Air Line with 618 miles.[9] The miscellaneous railroads have a total of around 1,500 miles of main line. In addition to main lines, there are more than 1,400 miles of sidings belonging to these railroads. The Southern Railway operates nine branches in the state. In addition to the above main lines, there are 62 miscellaneous railroads operated in the state, with track mileage ranging from 161 to 2 miles.

As would naturally be expected, some counties and regions are well provided with railroads, while others have poor facilities, or none at all.

There are four counties of North Carolina that have no railroads—Clay, Alleghany, Yadkin, and Dare; seven more counties with railroads skirting the boundary on one side or penetrating a corner merely—Watauga, Polk, Stokes, Caswell, Franklin, Hertford, and Tyrrell; and a score or more other counties that are served by lumber roads with poor passenger, freight, and express facilities for the general public. Indeed, nearly 1,300 miles, or almost exactly a fourth of our total railroad mileage, are lumber and mineral roads and short lines of miscellaneous description.

These counties—nearly a third of all the counties in the state—are remote and aloof from the centers of active life and business. They are away out on the rim of things. They have a poor chance to turn farm and woodlot products into instant ready cash at a fair price and profit in these days of sky-high values. Counties of this sort linger on and on upon domestic levels of life and livelihood, while their sister counties move on up into the big world of commerce with all its quickening influences.

These are the counties that beyond all others need whole-heartedly to bestir themselves in behalf of improved highways, adequate bridges, abundant motor freight lines, and country telephone systems. Without vigorous local interest in better transportation and communication facilities these thirty-odd counties must be or must become static or stagnant social areas, half-awake, half-asleep, half-alive, half-dead.[10]

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[8] Statistical Abstract of the United States, p. 382, for years 1860-1926.

[9] Compiled from the 1925 Report of the State Corporation Commission.

We have already seen that North Carolina is handicapped by the lack of an east and west trunk line railroad, a handicap under which no other eastern state labors and one which our forefathers a century ago attempted to overcome. In 1815 the legislature received a favorable report on a canal to connect the Cape Fear and Yadkin rivers. One of the first railway charters ever granted was in 1832, when the state legislature chartered the Cape Fear and Yadkin Railroad for the purpose of connecting these two rivers by rail. Both projects encountered insurmountable obstacles and had to be abandoned. Plank roads were built, which for years made east and west transportation possible. The next attempt to connect the east and west was in 1852, when the Western Railroad, later changed to the Cape Fear and Yadkin Valley, was chartered. After many years, and mainly through public aid of one sort or another, this road was completed from Wilmington as far as Mt. Airy. It was intended that the line should be extended to connect with the Norfolk and Western north of Mt. Airy. This would have given the railroad and the state direct connection with the Middle West, and "the shortest and most direct route between the South Atlantic states, Chicago, and the Northwest."

As a result of the panic of 1893 the company defaulted the interest due on its bonds and was placed in the hands of a receiver in 1894. The United States Circuit Court ordered that the road "must be sold as an entity" and that the sale must not be "chilled or impeded" in any manner. Notwithstanding this order, the road was bought jointly by the Atlantic Coast Line and the Southern Railway, which came into its ownership without making any cash outlay.[11] The road was dismembered, the Atlantic Coast Line taking over the section east of Sanford, the Southern the section west of Sanford. Thus ended the last attempt on the part of the people of the state to secure east and west transportation facilities. The link beyond Mt. Airy was never finished, the result being that the state still labors under the handicap of freight rate discriminations due to our peculiar situation.

In discussing this problem,[12] the State Ship and Water Transportation Commission says:

North Carolina has made such remarkable strides in agriculture and in manufacture that it is hard for us to realize the great injury done to the state by the rate discriminations against her. We have prospered notwithstanding our handicaps, but let us not hug the delusion that this will always be the case. We have progressed largely because of our natural resources and endowments and the indomitable will and courage of our people. The day will come when we will face the law of diminishing returns. The margin of advantage in natural endowments in manufacture and agriculture is rapidly being reduced as we exhaust our richest resources or, through growth in industry, are forced to utilize less productive elements. For example, we have already probably used our best water power sites and from now on will be forced to make use of inferior sites and naturally will be forced to pay higher rates.

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[10] *News Letter,* vol. VI, no. 35.

[11] For details see the Report of the North Carolina Ship and Water Transportation Commission, pp. 118-21.

[12] *Ibid,* pp. 10-12.

As we approach this condition in agriculture and manufacture a very small margin of unfairness in freight rates may become the determining factor in settling the fate of our industries. When our natural advantage is thus reduced to a parity with that of the manufacturers and farmers in other states, their advantage in freight rates and service will then appear even deadlier than it is now. These discriminations against us will then be a veritable millstone about our necks. These discriminations have built up the Virginia cities at the expense of the North Carolina cities. Yet, notwithstanding this, in the last few years we have begun to build some cities in North Carolina. This is partly due to our natural resources and to our grim determination to succeed in spite of the discriminations. But we have for over a half-century been paying a tremendous tribute to other states, and the time will certainly come in the history of the state when we will carry these burdens less jauntily.

The real test of a state's position is seen in her commerce and trade in which natural endowments play little part, and right here is our weakest point. We have progressed marvelously in agriculture, in manufactures, in insurance, but our trade and commerce have languished. We have built up no great wholesale distributing centers, and this is due not to the lack of ability on the part of our people, but to the deadly incubus of freight rate discrimination.

What could be more iniquitous than that a shipment from an outside state should be carried entirely through our state to Virginia and reshipped to a North Carolina city at a cheaper rate than if it had been stopped in North Carolina? Yet we have endured that humiliation for many years.

North Carolina is a long state running east and west, and our trunk line railroads run north and south. It would be a misnomer to call them "our" trunk lines—we have no part or parcel in them for they have consistently built up the cities and commerce of other states at our expense and they have robbed and stripped naked the only railroad we had that gave promise of affording an east to west trunk line.

Because of this radical defect in our transportation system, North

Carolina is in a tragic condition of being itself dismembered and of having most of the communications of its people north and south instead of east and west, and it has been made as difficult as possible for the people of the east and the people of the west to trade with each other. And thus it is that we have "lost provinces" in the west and "lost provinces" in the east. The great state highway system has already been of much service in mitigating these conditions, but North Carolina will never really come into its own, in the opinion of this commission, until we have a trunk-line railroad running from the Cape Fear basin to the coal fields of the west and the transportation gateways of the Middle West coupled with up-to-date and adequate water competition.

The matter of an east and west railway service has been discussed at some length because the economic and social development of the state has been greatly affected by the lack of such railway service. In so far as intra-state and north and south railway facilities are concerned, North Carolina is well supplied, but there can never be a large city in North Carolina under present transportation arrangements. We shall always pay tribute to our neighboring states until our handicaps in railroad connections east-to-west are removed. We cannot afford to remain primarily a "raw products" and a "retail" state.

Rivers, Waterways, and Ports

The state of North Carolina is peculiarly adapted, by nature, to the development of a system of waterways as is no other state on the Atlantic seaboard; her coast from the head of Currituck Sound on the north to the head of Myrtle Grove Sound on the south is protected by a string of sand dunes and beaches, leaving sheltered her sounds and river mouths and making them extremely desirous for barge and small boat traffic. The advent in recent years of the motor boat has revolutionized water traffic, and this fact together with a good road system and motor transportation should awaken the people of North Carolina to her possibilities.[13]

In addition to her vast inland waterways, with their possibilities for development, the state is well provided with river systems. There are four principal streams that flow in a general southeasterly direction emptying into the Atlantic Ocean or sounds contiguous thereto. These four rivers have a combined navigable length of approximately 400 miles. During the last 100 years there has been expended on these streams, mainly by the federal government, approximately $10,000,000. So much by way of an introduction to a brief account of our river systems, inland transportation, and port and harbor resources.

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[13] *Ibid,* p. 61.

River Systems. The river system of the state is determined by its peculiar topography. Its rainfall is copious, the fountain of numerous streams in all sections of the state; and, owing to the fact that the rivers in the middle and western sections have their origin among the highest mountains and on the highest table-lands on the eastern side of the American continent, these rivers, in their descent towards the sea, develop an immense amount of mechanical power. Those in the eastern section, with equal abundance of rain as a source of water supply, but with more gentle descent towards the ocean, offer facilities for navigation not possessed by the rivers of the middle and western sections, and towards their mouths expand into wide estuaries, connecting with the sounds and bays which provide the ports and harbors available for exterior commerce, foreign and domestic.[14]

The rivers that rise west of the Blue Ridge are diverted by that barrier toward the north and northwest and ultimately flow into the Gulf of Mexico by way of the Mississippi River. Those rising east or south of the Blue Ridge, after a general direction toward the east, ultimately pass out of the state in the middle portion and reach the Atlantic Ocean through the state of South Carolina.

The general river system is naturally divided into three subordinate ones entirely distinct from each other. The most characteristic of these is that originating on the plateau of the Blue Ridge, or on its western slope, the superior elevation of the high culminating masses of the great Appalachian chain throwing off the rivers to all the points of the compass. From this height the Tennessee River draws its chief supply, and the Ohio draws one of its chief upper tributaries. The volume of water poured out from this mountain reservoir is very great. Thus, the most western of them, the Hiwassee, with its tributaries, the Valley and Nottely rivers, draining two counties, Clay and Cherokee, an area of about 650 square miles, passes into southeastern Tennessee, a powerful stream with a breath of 100 yards, with a descent, from the sources to the state line, a distance of about 75 miles, of from 800 to 900 feet, providing great and continuous water power. The Tennessee River, united with the Cheoah, the Nantahalla, the Ocono Luftee, and the Tuckasegee, all large streams with a width of from 50 to 150 yards, with united volume and resistless power, cuts its way through the Smoky Mountains at the point of their greatest elevation and constitutes one of the principal branches of the greater Tennessee. The united drainage area of the Tennessee River in North Carolina is about 1,875 square miles. Other rivers west of the Blue Ridge are the Pigeon, with a drainage area of about 500 square miles; the French Broad and its tributaries with a drainage area of about 2,425 square miles; the Nolechucky with a drainage area of about 600 square miles; the Elk, the Watauga, and the New rivers, the first two being small streams, the third having a drainage area of about 700 square miles.

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[14] *North Carolina: The Land of Opportunity,* p. 79.

There is on the south and a portion of the east slope of the Blue Ridge another system which has, in the course of its streams, almost direct outlet into Georgia and South Carolina, viz., the Chatooga and the upper waters of the Saluda; and the Green and First and Second Broad, which unite to form the Broad River of South Carolina, uniting with the Saluda at Columbia to form the Congaree.

Another and a more important system is that which drains the northern half of the Piedmont section, and which is represented by the Catawba and Yadkin rivers. These streams have a general course a little north of east until they leave the plateau, when they turn at right angles to their former direction and pursue nearly a southerly course, and pass into South Carolina broad and placid streams, the Yadkin then taking the name of the Pee Dee and the Catawba that of the Wateree. Both of these streams receive their chief affluents from the north side, and many of these are large streams. Into the Catawba flow North Fork, Linville, John's River, and many others of less volume, while the Yadkin quickly gains consequence by the admission of Reddy's, Roaring, Elkin, Mitchell's, Fisher's, Ararat, and Little Yadkin.

The Dan, which becomes the Roanoke at Clarksville, Virginia, is the only river in the state that rises in the Blue Ridge and reaches within the state the waters of the Atlantic Ocean, by way of Albemarle Sound. The Dan has a length of 300 miles. A large portion of this river is navigable.

There is another important system having its origin in the middle section, discharging its waters into the sounds and bays of North Carolina, and giving to the people of the interior easy access to the sea and to the advantages of exterior commerce. This system includes Tar River, Neuse River, Haw River, Deep River, and the Cape Fear River, which is formed by the junction of the Haw and the Deep rivers. The Tar River rises in the western part of Granville and among the semi-mountainous hills of Person, flows towards the southeast, drains most of the area of eight counties, embracing about 5,000 square miles. Its fall from its sources to tidewater is upwards of 400 feet. It is navigable to Tarboro. At Washington it expands into a broad estuary, navigable for seagoing vessels, and thence takes the name of Pamlico River.

Neuse River has its sources in the highlands of Person and Orange counties. It becomes navigable for steamboats at Smithfield in Johnston County, all obstructions having been removed to that point. At New Bern it is two miles wide, and it is there joined by the Trent River, and the united streams soon widen to a breadth of eight miles, emptying at length into Pamlico Sound. It is navigable for vessels drawing fourteen feet of water as far up as New Bern. Its length is about 200 miles, and it drains an area of about 4,450 square miles.

Haw River and Deep River, which unite at Haywood in Chatham County to form the Cape Fear River, rise, the first in Rockingham, the second in Guilford County. The Cape Fear River, formed by the junction of these streams, becomes navigable at Fayetteville to Wilmington, a distance by water of 120 miles, giving an interior navigation not equalled by any other river in the state. It became a very important avenue from the earliest settlement of the country for the ingoing and outgoing trade of the interior and was early made the object of improvement by an incorporated company organized in 1795; thence by the state, and in late years by the general government which has taken in charge the maintenance of continuous navigation between Fayetteville and Wilmington. The aggregate length of the Cape Fear and its tributaries is about 500 miles, and its area of drainage not less than 8,000 square miles.

Among the larger tributaries to the Cape Fear River are the Black and Northeast rivers, both large, navigable streams. There are many smaller rivers in the eastern part of the state, among them being the Lumber and Waccamaw in the southeast, the Chowan and the Meherrin in the northeast, the North River, Little River, Perquimans, Pasquotank, Alligator, Scuppernong, Pungo, Bay, and others. Some of these are fairly important transportation channels, and all of them have possibilities of further development and use.

The aggregate length of the rivers of North Carolina is about 3,300 miles, and their total fall about 33,000 feet, or an average of 10 feet to the mile. As has been stated, around 400 miles are now navigable, while there are great possibilities for further development. The navigable rivers can be deepened and broadened, and many miles not now navigable could be made so. The rivers of eastern North Carolina have no value as power producers, but they do have vast possibilities as channels of transportation and communication. In the early days of the state's history these eastern rivers had large sums spent upon them by the state and by private enterprise.[15] The coming of railroads caused interest in water transportation to lessen, but during the last few years there has developed considerable renewed interest, and it appears that water transportation will again come to play a large part in eastern North Carolina commerce.

Inland Waterways. Between the mainland and the banks in eastern North Carolina are a number of sounds, two of them veritable inland seas, the others narrow and shallow. These sounds have an aggregate area of approximately 3,700 square miles. They are the result of a long succession of narrow islands, in width from a half mile to a mile or more, that stretch from Virginia almost to South Carolina, a distance of about 300 miles, and form the ocean frontage of the state. Through this narrow barrier the sea makes its irruptions to the sounds within, forming the inlets and outlets through which the operations of commerce are conducted. Some of these inlets are permanent; others are capricious, depending for their stability upon the condition of the ocean, but in their caprices offering no permanent obstruction to navigation.

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[15] For the records see the Report of the State Ship and Water Transportation Commission, pp. 61-72.

For a hundred years or more these sounds have been the scenes of hit or miss developments. Improvements have been undertaken and prosecuted when and where commerce would justify. Many millions of dollars have been spent on developing inland waterways, and millions more will be spent. At present there is an inland waterway from Norfolk to Beaufort, a distance of about 200 miles, and another from Beaufort to the mouth of New River and thence to Jacksonville. The inland waterway from Beaufort to Wilmington, a distance of 93 miles, is now being constructed at a cost of about $6,000,000, appropriated by the federal government. This waterway is to be extended into South Carolina and ultimately to the Gulf.

With these vast inland seas, sounds, and navigable rivers, North Carolina is said to possess the best natural resources for inland waterways of any state in the Union. Many states have spent vast sums to secure what nature has provided for North Carolina. Beyond a doubt these inland waterway resources will some day be more greatly needed and therefore more thoroughly appreciated than they have been in the past. It is possible for the entire Tidewater country to be linked up with a vast network of inland waterways.

Ports and Harbors. North Carolina is the only water-front state in the Union that does not have a real deep-sea port. The port of Wilmington is a deep-sea port for vessels of limited draft, but the business this port does is inconsiderable compared with that of other ports. In fact, only one water-front state in the Union clears a smaller net tonnage of vessels engaged in foreign trade than does North Carolina.[16] South Carolina ports clear ten times as much net tonnage of vessels engaged in foreign trade, and Virginia ports clear around sixty times as much, notwithstanding the fact that North Carolina ranks far ahead of either of these states in industry and agriculture. In other words, it is not the lack of business available, but the lack of a deep-sea port or ports through which the business created by North Carolina can be cleared. The state has far better deep-sea port possibilities than many states which have developed them in spite of natural handicaps. Perhaps the best single location for such a port would be at Southport, which, according to many experts who have studied the problem, possesses excellent possibilities. Naturally, if a port were to be established at Southport, it would have to be connected with an east to west trunk line railroad. This is what the state had in mind when it built the Cape Fear and Yadkin Valley Railroad, formerly referred to.

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[16] Statistical Abstract of the United States, p. 435.

The 1923 legislature, under the leadership of Governor Morrison, authorized a State Ship and Water Transportation Commission to study the whole matter of freight rates, inland waterways, and deep-sea ports. An able Commission made a thorough canvass of the transportation situation of the state and published its findings.[17] Certain recommendations of the Commission were submitted to a vote of the people in 1924, and after a short but strenuous campaign, for and against the proposals, the recommendations were defeated by a small majority. The Commission found that

> Without exception state-owned terminals have been self-supporting in every state where they have been built. That such terminals have not only been self-supporting but have paid off their bonded indebtedness and have effected a reduction in freight rates to the interior of the states that built them.
>
> The Commission believes that it is imperative for the good of the state that a maritime industry be created on the waters of the state, and that said industry will be both profitable in itself and will tend to reduce freight rates throughout the state and place said freight rates on a parity with those of other states and localities. The Commission believes that this can be accomplished without the state embarking upon the shipping business.

The following recommendations[18] were made by the Commission:

> 1. That the General Assembly create a Port Commission of five members, vested with full authority to select sites, construct port terminals with all necessary equipment, and that the said Port Commission be given full power to establish a traffic organization, to enter and prosecute complaints, either through the Corporation Commission or otherwise, in connection with rates and traffic regulations, and to do all things necessary to carry out the purposes of its creation and to bring relief in freight and traffic matters to the citizens of the State.
> 2. That $7,000,000 be appropriated for the use of said Port Commission, or so much thereof as may be necessary, for the purposes enumerated above.
> 3. That the Port Commission be authorized to purchase or lease

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[17] Report of the State Ship and Water Transportation Commission.

[18] *Ibid*, pp. 20-21. The bond issue (proposed) for the purpose of carrying out the recommendations was defeated by popular vote.

ships and operate the same, if in its opinion adequate shipping is not provided by private enterprise, and that $1,500,000 additional be appropriated for this purpose, or so much thereof as may be necessary.

4. That the State acquire the Cape Fear and Yadkin Valley Railroad as a basis for a trunk-line railway from the Cape Fear Base in to the Middle West, or otherwise provide such a trunk line.

The Commission believes and concludes that if the General Assembly will put these recommendations into effect, at a relatively small cost immense relief will be given to the State; that instead of begging for fair rates, we will be in position to demand them; that instead of fearing that we may lose the concessions already grudgingly given, we will be in position to secure as favorable rates as other States that have prospered at our expense.

It is only fair to point out in this discussion that many people are of the opinion that in water transportation, especially in deep-sea port possibilities, North Carolina labors under natural handicaps that are next to impossible to overcome.

Dr. Connor says "probably no state in the American Union has suffered more in its economic development on account of unfavorable geographic factors than North Carolina."[19] He cites interesting historic attempts to open ports in North Carolina. One attempt resulted from laws enacted and re-enacted by the Virginia Assembly (1679, 1705, 1726) which prohibited importation of Carolina tobacco into Virginia or its exportation through Virginia ports. These laws practically destroyed the tobacco industry in North Carolina, until the Crown rescinded the act in 1731. "For a century and a half North Carolina has struggled to free herself from the restrictions that geography has placed upon her commerce. Conditions changed, and new factors appeared, but the story repeats itself in every generation with substantially the same refrain." Attempts to establish ports and trunk line railroads have fallen through, and after each attempt "once more, as in colonial times, North Carolina became transportation territory for Norfolk and Charleston." At another place Dr. Connor cites a point of vast import. "Economic dependence on neighboring states was not the only result, nor even the worst result, of this situation. The keenest-minded and most far-sighted statesman (Archibald D. Murphey) that North Carolina has yet produced pointed out in 1815 that commercial dependence carries with it political and intellectual dependence."

It is a fact that, in spite of heroic attempts to establish deep-sea ports, North Carolina is still transportation territory for her neighbor states. The author does not share the view that this must always be so. The persistent attempts to establish deep-sea ports, the testimony of able army engineers, casual acquaintance with our harbor possibilities at and below Wilmington, and last but not least, stock-taking of what has been accomplished along the line of port development in American states and in many foreign countries with far less to begin with, force one to conclude that we need not remain "transportation territory" for our neighbors.

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[19] *North Carolina: Rebuilding an Ancient Commonwealth*, vol. I, chap. 1.

In so far as inland waterway transportation possibilities are concerned, there is no question about our natural advantages. Whether or not we ever achieve a deep-sea port, we should see that our excellent inland waterway resources are developed to their fullest possibilities.

And yet, despite the under-development of our water facilities, there is already a considerable volume of traffic. The grand total of seaport and river commerce of North Carolina in 1925 was 2,177,594 tons, valued at $96,157,000.[20] Wilmington's port claimed practically all of the coastwise and foreign commerce of the state, amounting to nearly $63,000,000. The Neuse led all the rivers in volume and value of traffic handled, followed in order by the Pamlico-Tar system, and the Cape Fear above Wilmington. The Northeast, Roanoke, Waccamaw, and others handled small amounts of traffic.

MISCELLANEOUS

The first rural free delivery line ever established was in North Carolina, in Surry County. There are now approximately 1,500 rural free delivery routes in the state, serving a great majority of the state's rural population. Rural free delivery has done a great deal to break down rural isolation and promote reading habits.

A network of wires gives every county in the state telegraph and telephone service. Two great telegraph companies and around 175 telephone companies cover the state so completely that even the remote rural districts may have quick communication with the outside world. However, in the per cent of homes having telephones, North Carolina compares unfavorably with other states. In 1920 only 12.2 per cent of the farms reported telephones, and the state ranked forty-second in that respect.[21] The state has been very slow to install community or coöperative telephone lines. In 1922 the state ranked forty-fifth in all telephones, with 44 per 1,000 inhabitants.[22]

The radio has been installed in a large per cent of the farm, as well as town, homes of the state, and probably already ranks ahead of the telephone as an agency of communication, especially for the rural people. Electric street railway lines are operated in Asheville, Charlotte, Durham, Greensboro, New Bern, Raleigh, Salisbury, Winston-

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[20] *Natural Resources.*

[21] Statistical Abstract of the United States, p. 602.

[22] *Ibid,* p. 352.

Salem, Wilmington, and Wrightsville Beach, and are supplemented by many local connecting bus lines.

With a half million motor cars operating over one of the best highway systems in America, an excellent intra-state and north-to-south railway service, a vast network of rivers and inland waterways, a state-wide motor bus service, rural free delivery, and in addition a network of telephone and telegraph lines, and the radio, North Carolina has, with the one great exception pointed out, little to complain about in the way of communication and transportation facilities. Distance has been virtually annihilated, and the state has become so small that people no longer think mainly in terms of counties and communities, but in terms of the state. The urge for a state-wide system of public education is only one manifestation of the change brought over the people by modern facilities for communication and transportation. Due mainly to the presence of excellent highways, North Carolina is said to be leading the nation in the rapidity with which she is consolidating her rural schools. The state ranks first in the number of rural school children daily transported by motor buses to consolidated schools, of which there were 941 in the state in 1927-28. There were 137,000 children provided with transportation facilities in 1927-28, at a per pupil cost of about one-half the average for all the states.

It would be interesting and profitable to discuss the economic and social results to the state of improved means of communication and transportation. The large increase of farms throughout the state, the high index of farm land values, the way in which farmers are merchandising their products over the state, the development of tourist and resort centers, the rapid consolidation of rural schools, improved relationships between town and country people, better appreciation of the vast resources of the state, are a few of the social and economic results of our modern communication and transportation facilities.

The immediate transportation and communication needs of the state appear to be: (1) the development of a deep water port on the coast if such is physically possible; (2) the construction of an east and west trunk line railroad penetrating the mountains and connecting the state directly with the coal fields and with the Middle West generally; (3) the completion of the inland waterway to Wilmington and the gradual development of the splendid inland waterway resources of the state; (4) improved telephone service, especially for the rural regions of the state; (5) further road construction by the counties and the state, with major attention given to school bus and rural free delivery routes, since the state has already laid out a highway system designed to care for the bulk of the state's passenger and freight traffic.

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CHAPTER XI

WEALTH, DEBT, AND TAXATION

THE PURPOSE of this chapter is to give a general idea about wealth, debt, and taxation in North Carolina. It is impossible in a few pages to do more than to present a general picture, although there is no other subject about which we have so much data. Especially valuable is the recent report of the State Tax Commission, a comprehensive volume of nearly eight hundred pages.

WEALTH IN NORTH CAROLINA

Wealth Production. In the production of wealth North Carolina stands well among the states. In 1923 the wealth produced by our factories, farms, forests, and mines amounted to more than one and a half billion dollars, the state ranking fifteenth in total wealth produced by these four factors.[1] Since the state ranks fourteenth in population, it is evident in the production of primary and secondary wealth North Carolina does about as well as the average state. The amount of wealth produced by our factories, farms, forests, and mines in 1927 was nearly $1,600,000,000,[2] notwithstanding the fact that the value of our agricultural products was at a low point that year. Only Texas in the South ranks ahead of North Carolina in the production of wealth. The next southern state (Oklahoma) lacks $400,000,000 of North Carolina's figure. The following table, compiled from official sources, shows the growth of factory, farm, forest, and mineral output from 1899 to 1927.

ITEM	1899	1909	1919	1927
All Manufactures	$85,274,000	$216,656,000	$943,808,000	$1,154,617,000
Agriculture	68,625,000	131,072,000	503,229,000	361,605,000
Lumber (Including Planing Mills)	17,442,000	33,525,000	66,328,000	53,190,000
Mineral Products	1,458,000	2,874,000	6,405,000	12,619,000

Accumulated Wealth. Wealth production is one thing; wealth retention is quite another. There seemingly should be a fair agreement among the states in wealth production and wealth retention. However, for North Carolina the difference is very marked. The state ranked twentieth in estimated total true wealth in 1925.[3] In 1927 the true wealth of the state was estimated to be $4,883,000,000,[4] and North Carolina ranked twenty-first.

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[1] *News Letter,* vol. XI, no. 49.

[2] *Conservation and Industry,* vol. V, no. 23.

A better comparison is the per inhabitant wealth. In 1925 the per capita estimated true wealth for North Carolina averaged $1,879, and the state ranked forty-first. In no year for which the estimated true wealth has been reported has North Carolina ranked better than forty-first in wealth per inhabitant. It is thus clear that in accumulated wealth the average person in the state does not possess a great deal, compared with other states. The truth is that there is a vast army of relatively poor people in North Carolina. The bulk of our people live on small farms whose average value is low. Nearly one half of these farmers are tenants who almost invariably possess little wealth. The home owning farmers of the western half of the state are far from being rich. Nearly a third of our population is Negro. Finally, a considerable element of the urban population, the wage earners mainly, possess very little wealth. It has often been said that North Carolina is a poor man's paradise. There is a great deal of wealth in the state, but also there is a large population, and the masses are relatively poor. This may be hard to accept, but it is a fact borne out by all available data.

Official evidence that clinches the above statement is revealed by a study of federal individual income tax returns. An analysis of the data for the income year 1926 shows that there were only 35,332 individuals who filed federal income tax returns. Of this total, 16,058 individuals actually paid an income tax, while 19,274 were non-taxable because specific exemptions exceeded net income. Actually then about one out of every 179 inhabitants in North Carolina paid a federal income tax in 1926.

The state had 2.45 per cent of the nation's population, but only eighty-five hundredths of 1 per cent of the individual federal income tax returns were filed by North Carolinians. The individuals filing returns reported seven-tenths of 1 per cent of the net income reported by all individuals in the United States who filed returns. The sixteen thousand-odd who paid a tax contributed less than one-half of 1 per cent (.46) of the total income tax paid by individuals. The per cent of our total population filing income tax returns was 1.24, and our rank was forty-third in this respect. For all the states the per cent of population filing individual income tax returns was 3.52, or nearly three times the rate for North Carolina.

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[3] U. S. Census Bureau estimates, reported by the National Industrial Conference Board, in *News Letter,* vol. XIV, no. 8. The last census estimate was for 1922.

[4] National Industrial Conference Board, ranked in *News Letter,* vol. XIV, no. 35.

The bulk of the individual (and corporation) income taxpayers of North Carolina are concentrated in a few counties. Only sixteen counties rank above the state average of 82.2 inhabitants per individual income tax return.[5] Mecklenburg County had the largest number of individuals filing federal income tax returns covering incomes made during 1926, the number being 4,450. Mecklenburg also ranks first in the number of inhabitants per individual income tax return filed, with one return for every twenty-one individuals. Buncombe is second in inhabitants per return, while Buncombe and Guilford are tied for second place in the total number of returns filed. Clay County had only one individual who filed a federal income tax return for 1926. There are fifteen counties in each of which not more than fifteen individuals filed returns.

There are eight counties that contain more than half of all the income taxpayers of the state. Sixty-one counties altogether have fewer income taxpayers than Mecklenburg County alone. The urban and industrial counties contribute the lion's share of income taxpayers. The few reported by the agricultural and rural counties are almost wholly town dwellers, generally the bankers, merchants, and professional men. Not many farmers file income tax returns, and most likely not many farmers have net incomes that are sufficiently high to be taxed under the federal law.

If the payment of income taxes is a fairly good index of income, and it certainly is an index of income within the taxable brackets, it is clear that the major part of the state's income is rather concentrated.

Progress in Accumulated Wealth. While it is true that the average wealth is still relatively small, the state has made great progress in wealth gains within recent years. In 1912 the estimated true wealth of North Carolina was $794 per inhabitant[6] and only one state, Mississippi, ranked below us. By 1925 the position of the state had risen to forty-first, which is approximately the rank at present. During the decade from 1912 to 1922 North Carolina made the largest per cent increase in wealth per inhabitant of any state, the gain being 135.2 per cent.[7] From 1912 to 1927 the state experienced a gain of 190 per cent in estimated total wealth, and only two states ranked ahead of us on this score.[8]

The large increase in wealth in North Carolina during the last decade is not attributable to any one or two or three factors, but is the result of the rapid development of practically every resource at our command.

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[5] *News Letter,* vol. XV, no. 8, ranks counties according to inhabitants per return for income year 1926.

[6] U. S. Census. Reported in *News Letter,* vol. II, no. 17.

[7] U. S. Census. States ranked in *News Letter,* vol. X, no. 20.

[8] *Ibid.,* vol. XIV, no. 35.

This feature of our leadership in the increase in wealth is evidence of a well-rounded and rapid development. Other states may be moving ahead more rapidly in one way or another, but it is to be doubted if any other state is right now or has been recently developing along as many lines as North Carolina. We have a varied, but interrelated, economic foundation, and it is the coördinate development of our interrelated resources that accounts for our recent accretion of wealth, or the attainment of such rank in wealth as we now have.[9]

Taxable Wealth. Due to the facts that wealth is not listed for taxation at its true value; that much wealth, especially intangible property, escapes taxation altogether; and that a personal exemption of $300 on household goods is allowed each taxpayer, the assessed value of North Carolina is far below its estimated true wealth. The total amount of wealth listed for taxation in 1927 was $2,934,011,733, the largest amount since the revaluation year of 1920 when, during a period of inflation, an attempt was made to get all the property in the state on the tax books. Property was listed that year at $3,156,243,202, an increase of nearly $2,000,000,000 over the previous year. The following table[10] shows the growth of taxable wealth during the last half century or so:

Year	Property Listed for Taxation
1872	$ 123,507,628
1882	180,376,525
1892	259,705,188
1902	433,372,940
1912	747,500,632
1919	1,099,296,290
1920	3,156,243,202
1922	2,576,338,426
1924	2,711,783,919
1926	2,794,931,069
1927	2,934,011,733
1928	2,963,302,911

Forsyth County ranks first in total assessed valuation with nearly $200,000,000 dollars in 1927, followed closely by Guilford with $183,000,000. Buncombe and Mecklenburg have $173,000,000 of assessed values each. It is interesting to note that each of two counties had a larger assessed value in 1927 than the entire state had in 1882. But even more significant as an indication of recent wealth gains in North Carolina is the fact that four counties in 1927 had almost as much

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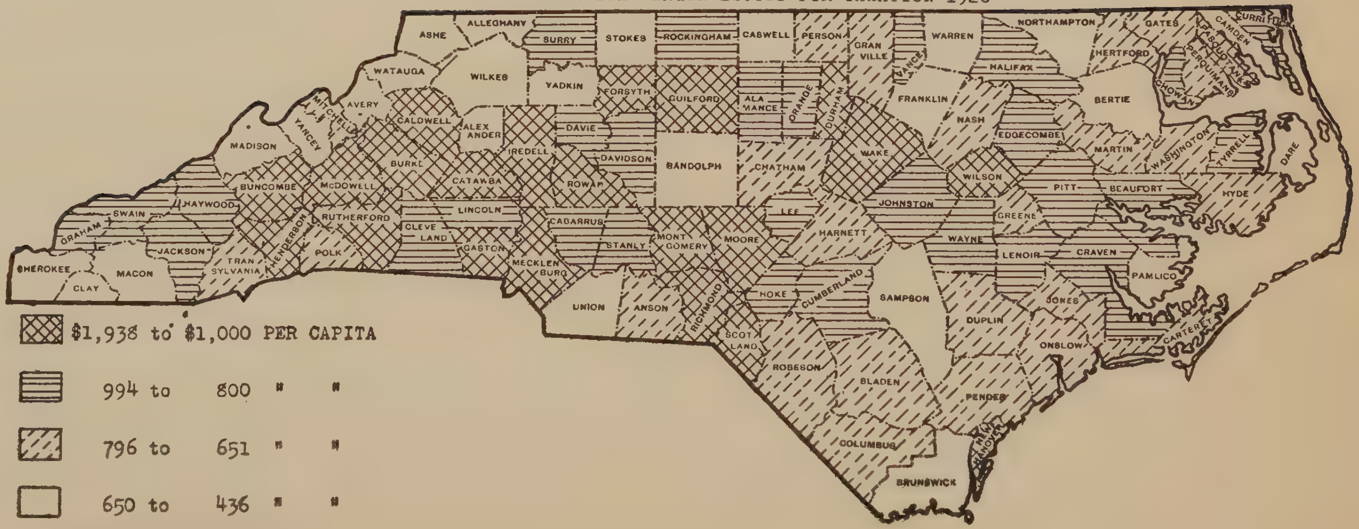
[9] *News Letter,* vol. X, no. 20.

[10] Reports of the State Board of Assessments.

NORTH CAROLINA

PER CAPITA WEALTH LISTED FOR TAXATION 1926


▩ $1,938 to $1,000 PER CAPITA
▤ 994 to 800 " "
▨ 796 to 651 " "
☐ 650 to 436 " "
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRAN VILLE
VANCE
WARREN
NORTHAMPTON
GATES
CAMDEN
CURRITUCK
HERTFORD
PASQUOTANK
PERQUIMANS
CHOWAN
HALIFAX
BERTIE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALA MANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
MITCHELL
AVERY
CALDWELL
ALEX ANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
BUNCOMBE
McDOWELL
BURKE
CATAWBA
ROWAN
HAYWOOD
SWAIN
GRAHAM
JACKSON
RUTHERFORD
HENDERSON
POLK
CLEVE LAND
LINCOLN
GASTON
CABARRUS
MECKLEN BURG
STANLY
MONT GOMERY
MOORE
LEE
HARNETT
JOHNSTON
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
CHEROKEE
CLAY
MACON
TRAN SYLVANIA
UNION
ANSON
RICHMOND
SCOT LAND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

(BASED ON TABLE NO.27)

wealth listed for taxation as the entire state had in 1912! There are seven counties with almost as much wealth listed in 1927 as the entire state had as late as 1919. This increase is in part apparent, but very largely real. The poorest county in the state, Clay, had $2,372,297 on the tax books in 1927.

The one hundred counties vary greatly in per capita taxable wealth. For the year 1926 Buncombe County stood first in per capita wealth listed for taxation with $1,938. Clay County ranked last with only $436 per capita.[11] The average taxed wealth for the state was $980 per capita. Twenty-four counties ranked above the state average; seventy-six below. This, again, is proof of the concentration of wealth, although taxed wealth is not concentrated to the extent of taxable incomes. Intangible wealth, which largely escapes taxation, is highly concentrated in the cities. Thus wealth is actually more highly concentrated in the urban counties than is revealed by the tax books.

As long as North Carolina was predominantly rural, wealth was small and fairly evenly distributed over the state. The development of industry and the concentration of population have effected great changes. Due to the fact that wealth tends to concentrate even more rapidly than population, a few counties now possess a large amount of the wealth and income of the state. This concentration has given rise to serious tax problems, forcing a change from local support of public enterprises, such as schools and roads, to state support. As wealth further concentrates and as poorer counties come to a better understanding of tax matters, the state will be asked, and probably forced, to finance in whole or in part more and more of the functions that it has been customary for the counties to support.

Negro Taxable Wealth. The small amount of true and taxable wealth per inhabitant is due in a large measure to the fact that Negroes, who constitute around 28 per cent of our population, have not yet accumulated any considerable amount of wealth. The Negro race has greatly improved its economic status—nearly one-third of the Negro farmers of the state own their farms. The true wealth of the Negroes of the state is probably at least $250,000,000. The Negro wealth listed for taxation is now around $125,000,000. Since only about 60 per cent of the true value is listed, and each lister is allowed a personal exemption of $300, not to mention non-taxed wealth and wealth that escapes taxation, it is clear that the Negroes of the state are worth at least $250,000,000.

However, they still average far below the white people in true and taxed wealth. Judging from the tax books alone, it appears that the average white person is worth around eight times as much as the average

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[11] *News Letter,* vol. XIV, no. 10, ranks counties.

Negro. As a matter of fact the difference is even greater since whites own nearly all the intangible wealth, which largely escapes taxation. Negroes are 28 per cent of the population, but they own only 4 per cent of the wealth listed for taxation. The average Negro taxable wealth was $133 per capita in 1924, compared with $34 in 1910.

Durham County ranks first in Negro taxable wealth, with $335 per inhabitant. The average Negro in Yancey County is worth only sixty-three dollars on the tax books. Five mountain counties do not report any wealth listed by Negroes. It is interesting to note that three city counties, and three mountain counties with small Negro ratios, comprise the first six counties in per capita Negro taxables. The counties that come next are mainly tidewater and mid-state counties in which the Negro ratios are not excessive. But after a few city and tidewater counties have been disposed of there seem to be very few further groups or trends that can be pointed out.

We would say that generally Negroes appear to have accumulated more wealth in those counties in which they are a moderate ratio of the total population, and especially in such counties with large cities. Generally where Negroes are an excessive ratio, as in the cotton and tobacco belt, and also where they are a very small ratio, they do not get ahead so rapidly. But there are several exceptions to any conclusions that may be drawn, probably due to the lack of uniformity in listing property for taxation. Some mountain counties rank high, some very low. And so with every other geographic, economic, or race-ratio group.[12]

PUBLIC LOCAL DEBT

All available data show that North Carolina is one of the most heavily bonded states in the Union. The aggregate bonded debt of the state[13] and its subdivisions on June 30, 1928, was approximately $540,000,000. The State Tax Commission after an exhaustive investigation reported the state debt (total) as $155,000,000, the county debt as $162,000,000, the debt of townships and special tax districts as $45,000,000, and the debt of cities and towns as $178,000,000. State and local sinking funds amounted to around $19,000,000, leaving an aggregate net debt of $521,000,000.

On an aggregate basis, North Carolina has the second largest state debt; on a per capita basis the largest state debt; and on a wealth-debt ratio basis, the largest state debt.

Just how the state ranks in aggregate debt, state and local, at the present time is slightly problematical, but certainly it is near the top. According to data compiled by the National Industrial Conference

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[12] *News Letter,* vol. XII, no. 48. This issue is devoted largely to a survey of Negro taxable wealth in 1924.

[13] The state debt is discussed in chap. XIII.

Board in 1925,[14] the state ranked ninth in aggregate per capita debt and second in ratio of debt to wealth.[15] The following data show the growth of state and local public debt in North Carolina since 1913:

	1913	1922	1925	1928
Aggregate Net Bonded Debt	$31,071,000	$159,940,000	$327,157,000	$521,000,000
Per Capita Debt	$13.38	$59.97	$116.34	$177.20
Rank of State by Size of Debt Per Capita	41	23	9	—
Rank of State by Ratio of Debt to Wealth	14	5	2	—

It is thus highly probable that at present the state ranks first in all debt on a debt-to-wealth ratio basis, and among the first half dozen states in per capita net debt. Of the entire debt of the state, 94.2 per cent has been incurred since 1918. For the state government 95.8 per cent of its debt has been incurred since 1918; and for the local governments, 93.5 per cent.[16]

County, District, and Municipal Debt. The county debt of $162,000,000 is equivalent to 5.45 per cent of the total assessed valuation of the 100 counties, and the debt of townships and special taxing districts represents an additional 1.55 per cent of the total valuation. The latter is not an obligation of all the property in a county. Some areas have no local debt, others considerable; the average is 1.55 per cent of the valuation. Thus the aggregate indebtedness of the counties of the state and their subdivisions (exclusive of incorporated towns) is $207,000,000, or 7 per cent of the taxable wealth. The percentages range from 2.7 in Forsyth to 24.8 in Carteret. Altogether there are 31 counties where the figure is in excess of 10 per cent.

Urban property is encumbered with an additional $178,000,000 debt which is equivalent to 12.4 per cent of its assessed valuation. Thus urban property has, on the average, an encumbrance in the form of public debt of 19.4 per cent of its value. Most of this debt must be liquidated by a tax on property.

The state debt amounts to 5.2 per cent of the taxable wealth of the state. It does not, however, rest on property. Municipal debts range from seven-tenths of 1 per cent of the assessed value of indebted towns in Pender County to 40.2 per cent in Stokes. In 65 counties the municipal debt exceeds 10 per cent of the assessed value of urban property, and in 11 counties it is in excess of 25 per cent.

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[14] Table No. 25, 1925-26 report, except for 1928 data.

[15] The aggregate debt in 1925 was $327,157,000, compared with $540,000,000 in 1928.

[16] Report of the Tax Commission, p. 607.

The annual cost of carrying the present bonded debt of the state and its subdivisions is approximately $30,000,000 in interest alone. This is around 50 per cent more than the entire current cost of the state government, and considerably more than half the total cost of operating the 100 county governments of the state. The tax levy for debt service, exclusive of the state debt, is around $23,000,000 annually. More than 30 per cent of the income from the property tax is required to carry the debt service of local governments.[17] There are counties in the state where around one-half of the tax money collected annually is applied to debt service. In a large number of counties, however, the debt is only normal and gives little concern.

The people of the state are not alarmed about the debt that has been accumulated. On the other hand, they are proud and happy over the good roads, fine schoolhouses, and other improvements that have been secured much more rapidly than they could have been secured on a pay-as-you-go basis. Few question the wisdom of building on borrowed capital. But the state and its subdivisions have reached a point where a halt must be called. The reasonable limit has been reached, and further bonds should be issued only upon urgent necessity.

In commenting on this situation the State Tax Commission, in its findings and recommendations, says:

> It is, of course, understood that this indebtedness is in the main represented by capital investments of a partially permanent character—roads, institutional buildings, schoolhouses, courthouses, paved streets and sidewalks, water and sewer systems, and other like improvements of a necessary character; and that for our tax money we are having the use of, and gradually paying the capital investment for, these improvements. But our enjoyment of capital improvements, however desirable, must bear a sensible relation to our reasonable ability to maintain and pay for them.
>
> We suggest that the General Assembly guard, with something more than casual courtesy, proposed authorizations for additional bond issues by local governments without a vote of the people. And in view of the extreme limits of indebtedness already reached, we recommend amendment of the county government laws and the municipal finance act by prohibiting bond issues for any purpose without submission to a vote of the people.[18]

There are state and local constitutional limits beyond which bond issues are prohibited, but the constitutional prohibitions have been of no effect with respect to all the major purposes for which bonds have been issued and taxes levied by local governments. Local boards have too often abused their power, the result being, for many regions, county, district, and municipal debts "that do not bear a sensible relation" to the ability of these local units to carry the debt.

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[17] Report of the Tax Commission, p. 598.

[18] *Ibid.*, p. 28.

The decade following 1920 will go down in North Carolina's history as the period of great expansion in public roads, buildings, and other more or less permanent improvements by the bond route. North Carolinians generally are proud that they dared to lead off in the United States in public construction and reconstruction at a period of depression and uncertainty. Not only does the state have its improvements to show for its expenditures, but the vast amount of public construction has been of great general economic value in many ways. From the point of view of the indirect benefits that have accrued, no better time for initiating this program of construction could have been selected. But new days bring new needs, and there is no question about the wisdom of using great caution in the further issuance of bonds. The wealth of the state sets a reasonable limit to the debt that may be acquired, and, generally speaking, that reasonable limit has been reached.

TAXATION

The concluding section of this chapter will be concerned mainly with phases of local taxation. State taxation is discussed in the chapter on State Government. A discussion of federal taxation would have no significance since federal taxes are levied uniformly in all the states, the same rates applying to the respective sources wherever they exist. It is interesting to point out that North Carolina today ranks second only to New York in amount of taxes paid to the federal government, this state contributing about 7 per cent of the total collections. This fact is no indication of the wealth or income of the state. Our high rank is due almost entirely to the fact that North Carolina is the nation's chief manufacturer of tobacco, upon which the federal government levies a large tax. It is collected in North Carolina but paid by tobacco consumers throughout the United States. Except for the tobacco tax, our payments to the federal treasury are not considerable.

State and Local Tax Burdens Compared. The burden of taxation is a relative matter. People are not so much interested in the amount of taxes they pay as they are interested in the amount they pay compared with what others pay. Unfortunately, the data on relative tax burdens are scanty and more or less unsatisfactory. Such as are available lead one to conclude that the tax burden in North Carolina, generally speaking, is not high compared with other states. In the very nature of things it could not be high. There is no single state or local function on which any excessive amount of taxes is spent. For instance, in schools, which consume a large share of tax moneys, our support is small relative to other states. All available data point to the conclusion that on the basis of per capita cost of state and local government, North Carolina ranks around forty-first to forty-third; and on the basis of taxes to wealth and income, the tax burden is about the average for all the states.

The following data[19] are the best available indices of the relative burden of state and local taxes in North Carolina compared with other states. The table gives the total amount of state and local taxes collected per capita and the rank of North Carolina.

STATE AND LOCAL TAX COLLECTIONS

	1924	1925	1926
N. C. Total per Capita Tax	$20.37	$24.40	$28.97
N. C. Rank Among the States	44	42	41
U. S. Average per Capita Tax	$40.62	$42.63	$45.96
South Atlantic Average	24.19	26.57	30.21

The state holds about the same rank in average per capita tax that she holds in average per capita wealth and income, which means that the average tax burden on wealth is about the average for all the states.

A good measure of the relative burden of taxation on corporations is afforded by official data[20] which show that for the year 1924, 15 per cent of the net profits of North Carolina corporations was devoted to state and local taxes, the amount being smaller in only four states; and that 26.1 per cent of the net profits was devoted to all taxes, the per cent being smaller in only three states. If these official data are correct, or reasonably reliable, it is evident that North Carolina corporations were not heavily taxed as late as 1924.

This same report,[21] however, shows that 6.25 per cent of the total and business income of individuals who filed federal income tax returns for the year 1924 went to pay state and local taxes. The per cent was larger in only one state. This high per cent is due to the fact that our state government is supported largely by taxes on incomes. The cost undoubtedly bears heavily on the small per cent of our population upon whom state taxes fall.

There are no recent data that compare tax rates on property by states. Data released by the United States Census Bureau covering the year 1922 gave the average total tax levy on property for all state and local purposes. At that time the average for North Carolina,

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[19] National Industrial Conference Board, Table 37, 1926-27 Report.

[20] U. S. Bureau of Internal Revenue, compiled by National Industrial Conference Board, Table 45, 1925-26 Report.

[21] Table 49.

$1.47 per hundred dollars assessed value,[22] was the lowest in the United States. This fact is not especially significant since property is not listed uniformly in the various states. The same data showed that the per capita total tax on property was $13.98, the amount being smaller in only five states, a much more significant fact.

Some measure of the burden of taxation in North Carolina is afforded by the researches of the State Tax Commission, which reports that taxes absorb 28.7 per cent of the net income of owner-operated farm lands, 28.9 per cent of the net income of rented farm lands, 29.5 per cent of the net income of rented property in cities, 25.2 per cent of the net earnings of steam railroads, 16.3 per cent of the net earnings of electric light and power companies, and 24.4 per cent of the net earnings of telephone companies.[23] How these rates compare with rates in other states at the present time is not known. The Tax Commission shared the opinion that the rates should not be allowed to increase.

> All of these facts are persuasive, to our minds, that we have reached a level of property taxation that raises a danger signal, and that requires every reasonable effort to reduce tax levies on property in so far as it may be done without impairing the high character of public service furnished by the state and local governments throughout the state.[24]

County Tax Rates. For the fiscal year ending June 30, 1928, the taxes imposed by the counties and special districts, not including towns and cities, amounted to nearly $46,000,000, or nearly a half million dollars per county upon an average. The average county and district levy required to raise this volume of taxes was $1.56 per hundred dollars assessed value. The rate was lower than this in only twenty-five counties, and equal or above in seventy-five counties.

The volume of taxed property ranged from nearly $200,000,000 in Forsyth to $2,333,000 in Clay. Incidentally, Forsyth has the lowest tax rate and Clay the highest. While not a perfect correlation, there is a decided tendency for the rate to be in inverse ratio to the valuation. There are certain minimum expenses which every county must meet, and the counties with little taxable property find it necessary to levy very high rates.

The amount of taxes collected ranged from $2,333,000 in Buncombe to $55,539 in Dare. In eight counties the annual levy exceeded $1,000,000, and in twenty-four others it exceeded $500,000.

The county-wide rates varied from 60 cents on a hundred dollars of property in Forsyth to $3.10 in Clay. In only eight counties was the rate less than $1.00, while in twelve counties it was $2.00 or more. But, because of the presence or absence of local tax districts, the county-wide rate does not throw much light on the local tax burden.

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[22] *News Letter,* vol. X, no. 14.

[23] Report of the Tax Commission, pp. 7, 33.

[24] *Ibid.,* p. 7.

When the counties are ranked on the basis of average tax rates, county-wide and special, it is found that Forsyth is the only county with a rate less than a dollar, its rate being 69 cents; whereas there are forty-one counties with a rate of $2.00 or more, and twelve with a rate in excess of $2.50. Practically all of the counties with very high rates are counties with a very small amount of taxable property. The forty-three counties which have an assessed valuation of less than $15,000,000 have an average tax rate of $2.17; whereas the nine counties which have $50,000,000 have an average tax rate of $1.16. Some of this discrepancy may be due to differences in standards of valuation and some to differences in the quality of administration, but most of it is due to the difference in the volumes of taxable wealth. There can be no equality or approximation to equality in tax burden unless there be some consolidation of counties, or the joint support of particular institutions and agencies by two or more counties, or the assumption of more of the financial burden by the state. There are possibilities in all three directions.

The urban tax on property is in addition to the county-wide rate. The urban rates vary a great deal, being very high in certain smaller towns that have accumulated a large bonded debt. A study of urban tax rates[25] for practically all of the cities of the United States with more than 30,000 inhabitants shows that the North Carolina cities have comparatively low tax rates, either apparent or adjusted. Winston-Salem has the lowest tax rate of any city in the United States, and the other cities of the state follow not far below Winston-Salem.

Sources of Revenue. Relatively few people are familiar with the sources of tax moneys. In the table on page 195 the county and municipal tax collections[26] for the year 1925-26 are distributed by sources.

It is thus seen that more than nine-tenths of all county and school taxes are derived by a tax on property, while less than six-tenths of the municipal tax burden falls on property, public services and licenses making large contributions. Outside of incorporated towns, the most burdensome tax is often the special local school tax.

There is a general and growing feeling in the state that property is too much relied upon as a source of county, district, and municipal revenue.

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[25] C. E. Rightor, *National Municipal Review,* Dec., 1928.

[26] Sources of state revenue are presented in chap. XIII.

Types	Amount	Per Cent
COUNTY AND SCHOOL TAXES		
Property	$37,206,352	91.3
Poll	839,710	2.1
Fines	648,956	1.6
Dog	182,560	0.5
Licenses	1,856,171	4.5
Total	$40,733,749	100.0
MUNICIPAL		
Property	$17,597,001	58.4
Poll	254,264	0.8
Fines	1,109,897	3.7
Licenses	2,204,654	7.3
Public Services	8,989,790	29.8
Total	$30,155,606	100.0

The general property tax was introduced at a time when tangible property, especially land, was a fair measure of wealth. Before the Industrial Revolution practically all income-producing property was tangible. Today a scrap of paper may represent millions of dollars and huge incomes may be realized without any visible property. Yet we cling to property as the main basis of taxation. We ought to recognize that taxes are paid out of income, not out of property. We have made a beginning in taxing income, but only as a supplement to the property tax. We consider it confiscatory if the government takes more than a moderate share of one's income through the income tax (it is unconstitutional to take more than 6 per cent in this state), yet we often exact thirty, forty, or fifty per cent of the income from property through the property tax.[27]

Cost of Collecting Taxes. The cost of collecting taxes varies widely. There are two types of cost, direct and indirect. The direct cost covers the cost of maintaining the tax collector's office, who happens to be the sheriff in eighty-one counties, minus allowances for certain services not connected with tax collecting. The indirect costs are many, chief of which is interest on money borrowed in anticipation of the collection of taxes, much of the borrowing being necessitated by delay in collecting.

Data collected by the Tax Commission[28] show that the direct cost of collecting the 1927-28 taxes varied from .73 of 1 per cent in one county to 5.24 per cent in another. The indirect cost varied from nothing in twelve counties to 6.55 per cent in one county. The chief indirect cost, as noted, is interest paid on tax-anticipation loans. The fact that twelve counties got along without borrowing any money in anticipation of taxes and twenty-four others paid out in interest less than one-fourth of 1 per cent of the levy suggests that it might be possible for any county to eliminate this expense by careful financing. The necessity for borrowing is due very largely to inefficiency and laxity in tax collecting.

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[27] P. W. Wager in *News Letter,* vol. XIV, no. 3.

[28] Compiled in tabular form in *News Letter,* vol. XV, no. 12.

The situation with respect to the collection of taxes in a few counties has become astounding and the tax laws have not effected a remedy. In reality the laws intended to enforce the collection of taxes have been ignored. At June 30, 1928, the uncollected taxes of the 1927 levy, in some instances, amounted to approximately 50 per cent of the total levy and when the land sales, which were postponed, were finally held, they amounted to as high as 20 per cent of the total levy.[29]

When the direct collecting cost and the major indirect cost—interest on tax-anticipation loans—are combined, it is found that the total cost of collecting taxes is in many counties excessive. In thirty-six counties it is in excess of 3 per cent, running as high as 9.61 per cent in one county. To extract so large a portion of the taxpayer's dollar in the process of collecting appears a needless waste. The more of a taxpayer's dollar that can reach the treasurer and reach him promptly, the less the levy need be. There are many phases of administration where economies can be effected, and this is one that should receive full attention.

Delinquent Taxpayers. As has probably been anticipated, a large part of the indirect cost of collecting taxes is the result of delinquency on the part of taxpayers. Counties vary a great deal in this particular. Data collected by the Tax Commission[30] show that for the year 1928 four counties collected over 99 per cent of the tax levy without advertising, that six others collected over 97 per cent, and that half of the counties collected over 93 per cent. On the other hand there were twenty-one counties which found it necessary to advertise from 15 to 33 per cent of the levy. Most of the counties with high ratios of delinquency are Tidewater or Mountain counties with high tax rates and small cash incomes. The state average of taxes advertised for sale was one-tenth of the gross tax levy.

Between the dates of advertising and sale, the taxpayers paid 42 per cent of the taxes advertised. Fifty-eight per cent of the taxes advertised as delinquent were never collected, and the county had to take liens on the property. These liens represent 5.38 per cent of the total levy. The per cent of the total tax levy bought by the counties[31] ranged from nothing in five counties to nearly 22 per cent in one county. In twenty-one counties the county had to buy in 10 per cent or more of the total tax levy.

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[29] Report of the Tax Commission.

[30] *News Letter,* vol. XV, no. 13.

When fifteen to twenty per cent of the tax on landowners has to be collected by duress it is evident that there is something seriously wrong with agricultural income, or that the tax rate is burdensome, or that there is great laxity in the collecting machinery. The truth is that all three factors operate, and hence that there is no single remedy for the situation. There are many North Carolina counties which are low both in payrolls and in agricultural income. There are counties which, because of little taxable wealth, have excessively high tax rates. These conditions do not justify, however, laxity in tax administration. In fact, they make efficient administration more imperative.[32]

Lack of Uniform Listing of Property. In North Carolina

Property is listed for taxation largely on the principle of let your conscience be your guide. Some people are conscientious, even when it comes to paying taxes. Others seem to have only wee small consciences. The tax book should be awarded the annual prize for the best book of fiction produced during the year. A few hours spent thumbing through the local tax sheets will prove to be highly entertaining and enlightening. The climax to the tax sheets will be found under the items of personal property. The ordinary taxpayer has a fierce battle with his conscience when he sets out to list his personalty. And usually the taxpayer gets the best of the fight. There is little uniformity in the listing of real property, but when it comes to listing personal property the stage is all set for vaudeville.[33]

The constitutional requirement is that property shall be listed at its true value, but in no county is this the policy. In many counties the practice is to list at some per cent of the true value, as 55 per cent in one county, 75 per cent in another. The result is that certain wealthy counties look poor on the tax books.

Livestock, for instance, has a fairly uniform value, yet horses, cattle, sheep, and other forms of livestock are listed at from three to five times as much per head in some counties as in others.

The Tax Commission found rather wide variations in the ratio of assessed valuations to estimated market values of the various kinds of property. The assessed valuation of railroads was 74.9 per cent of their estimated full market value; electric light and power companies, 68.8; telephone companies, 74.2; city business property, 57.6;

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[31] *Ibid.*, vol. XV, no. 14.

[32] *News Letter,* vol. XV, no. 14.

[33] *Ibid.*, vol. XII, no. 42.

residence property, 63.1; and farm property, 75.3 per cent.

There is only one remedy to the present indefensible policy employed in listing property in North Carolina, and that is to adopt a state-wide policy requiring property to be listed at its true value in every county, or at some uniform per cent of its true value. The school equalization fund, for one thing, will be a mockery until such a policy is adopted. Nor will it ever be possible equitably to apply different tax rates to different classes of property, which many desire to do, until all property is listed at its true value, or uniformly.

If it is desired to discriminate between different forms of property, this could be done by securing a constitutional amendment allowing different rates to be applied to different classes of property. It is thought that this plan is necessary in order to bring out of hiding the vast amount of intangible wealth which fails to appear on the tax books. Year by year the amount of such wealth listed for taxation has decreased.

The tax situation in North Carolina is confusion worse confounded. The Report of the Tax Commission contains a vast amount of data that need to be studied. Additional investigations should be made. The state needs a permanent commission whose business it would be continually to study tax problems and advise the legislature at its biennial meetings. The tax machinery has been patched up here and there from time to time so that today it is a hodgepodge, thoroughly lacking in plan, and leaving the tax burden light on some taxpayers and heavy on others. A thoroughgoing study of modern conditions needs to be conducted and a completely new tax system devised in the light of them. This would probably necessitate the calling of a constitutional convention.

From the above survey it seems that the following conclusions can be drawn:

1. There is in the aggregate a large amount of wealth in North Carolina, but the per capita wealth is not large, the state ranking around forty-first to forty-third in this respect.

2. The reasonable limit in incurring bonded debt has been reached. This is true for all units of government, state, county, local, and municipal. There are places where, and occasions when, further bonds can be issued without harm, but rare judgment should be employed in incurring further debt.

3. The general burden of taxation in North Carolina is not excessive. Per capita tax expenditures are small. The tax rate per unit of wealth is not excessive. But because of the patchwork tax system that exists, there are those who are excessively taxed and those who pay little or nothing. The problem is not smaller expenditures but an

equitable distribution of the burden. There is no demand in the state that any present function be curtailed. Nor is there any necessity for such action.

4. The chief hope for tax relief and tax reduction lies not in curtailing useful expenditures, but in more efficient administration, more thoroughgoing and more equitable assessments, the building up of taxable resources, sound fiscal operations, and a gradual reduction of interest charges through liquidation of debts. Another important tax relief measure would be the consolidation of the one hundred counties into not more than fifty counties. Improved means of communication and transportation have made our counties ridiculously small. There are today far too many county government units. Larger units would make for efficiency, and several million dollars could be saved annually by consolidation. Very naturally consolidation will never be proposed by the courthouse groups. It must result from public pressure and as a tax relief measure.

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CHAPTER XII

RURALISM AND URBANIZATION

A Rural State

North Carolina is predominantly a rural state. Although we enjoy high rank as an industrial state, we have achieved this position without developing any large cities or any considerable urban population. That we are still predominantly rural may be seen from the following facts. In 1920, 71 of every 100 inhabitants lived outside of incorporated places of any sort or size whatsoever. The urban[1] population of North Carolina in 1920 was only 19.2 per cent of the total, and only six states had smaller urban ratios. The urban ratio in 1910 was 14.4 per cent.

The smallest open country population ratio in 1920 was in New Hanover County with 16.8 per cent. At that time there were only six counties with as many as half of their inhabitants living in incorporated places of any sort or size.[2] In 70 counties from three-fourths to the entire population lived outside of incorporated places. There were three counties that were 100 per cent open country, and 22 counties with 90 per cent or over of their population living outside incorporated places.

Sixty-eight counties did not have within their borders a town of as many as 2,500 inhabitants, and there were only 67 places of this size or over in the entire state.

In 1920 the actual farm population was 58.7 per cent of the total population, and only four states[3] had larger farm population ratios. Since 1920 these four states either have lost farms or have had only nominal increases, while North Carolina has had a large increase. This probably means that our farm population ratio today is almost the highest of all the states. Certainly our position has not declined since 1920.

The 1925 Census of Agriculture reports the farm population of North Carolina as being 1,446,881.[4] Only Texas had more people living on farms. Our farm population was around 135,000 larger than that of the third ranking state. Thus in farm population ratio and volume North Carolina stands almost at the top. In other words, the majority of our inhabitants live directly by farming. Those who live by extractive industry other than agriculture are a considerable element of our population, since North Carolina is an important lumber and fishing state and engages in other extractive activities.

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[1] Urban means incorporated places of 2,500 inhabitants or over.

[2] For ranking of counties see *News Letter*, vol. VII, no. 4.

[3] For rank of states see *News Letter*, vol. IX, no. 33.

[4] The farm census was taken in January when fewest people are on the farm.

North Carolina, in spite of the fact that she is developing rapidly as an industrial state, is holding her farm population ratio remarkably well. Between 1910 and 1925 only three states had larger numerical increases in farms. This means that industrial development is not taking place at the expense of agriculture. It is more or less unique for industry and agriculture both to make such healthy gains in the same state at the same time. This mainly accounts for the healthy growth of total population in the state.

That North Carolina is dominantly rural may further be seen by brief comparisons with the average for the United States. For North Carolina, as has been stated, 19.2 per cent of the population in 1920 was classed as urban, while the ratio for the United States was 51.4 per cent urban. The farm population ratio for North Carolina was 58.7 per cent, while the average for the United States was only 29.9 per cent. Since 1920 the farm population ratio for the United States has declined much more rapidly than for North Carolina. Approximately one-fourth of the people of the United States live on farms today, while the ratio for North Carolina is probably not less than 55 per cent. In other words, the rural and farm population ratios for North Carolina are more than twice as high as the ratios for the United States, and the United States farm and rural ratios are falling more rapidly than the North Carolina ratios.

The open country population ratio in North Carolina has been declining at the rate of five points every ten years since 1900, at which time 81 per cent of our inhabitants lived in the open country. The ratio in 1910 was 76 per cent, and in 1920 it was 71.4 per cent. If the trend continues, and the evidence points to a further steady decline, the open country ratio in 1930 will be about 66 per cent, and in 1940 about 60 per cent. It is practically certain, in other words, that for many, many years to come North Carolina's rural ratio will be far above the average for the entire nation.

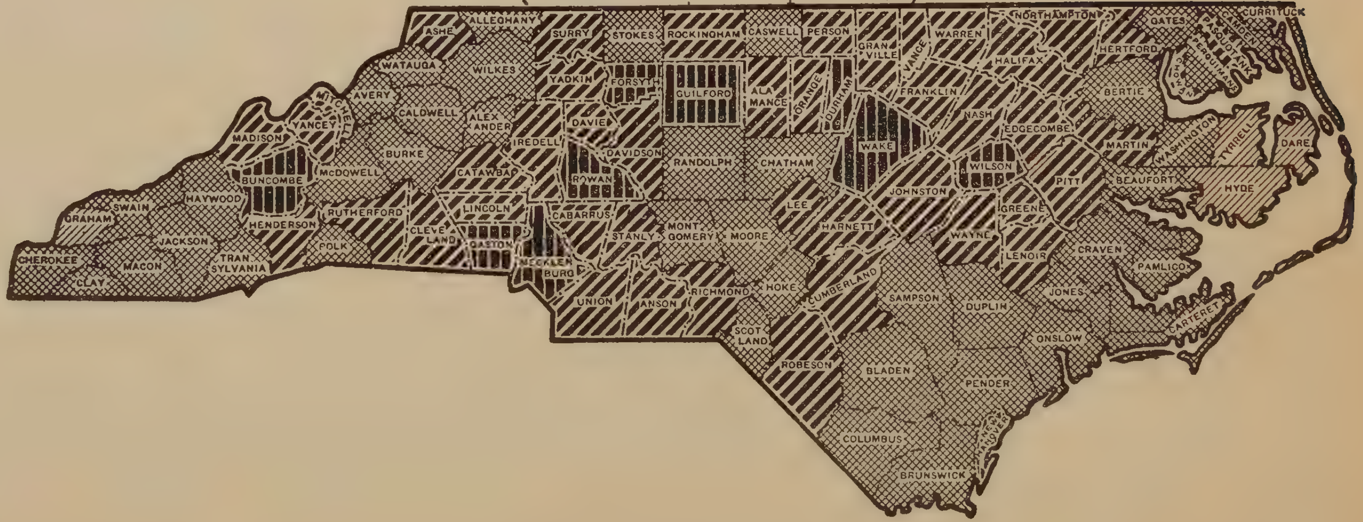
The following table from the abstract of the 1920 Census shows the rate at which our rural population ratio has been declining since 1890:

YEAR	NO. PLACES 2500–5000	Per Cent of Total Population Living in Places of:				
		25,000–100,000	10,000–25,000	5,000–10,000	2,500–5,000	RURAL
1920	28	6.1	6.0	3.5	3.5	80.8
1910	20	2.7	4.0	4.4	3.3	85.6
1900	16	..	4.6	2.2	3.0	90.1
1890	11	..	3.4	1.3	2.5	92.8

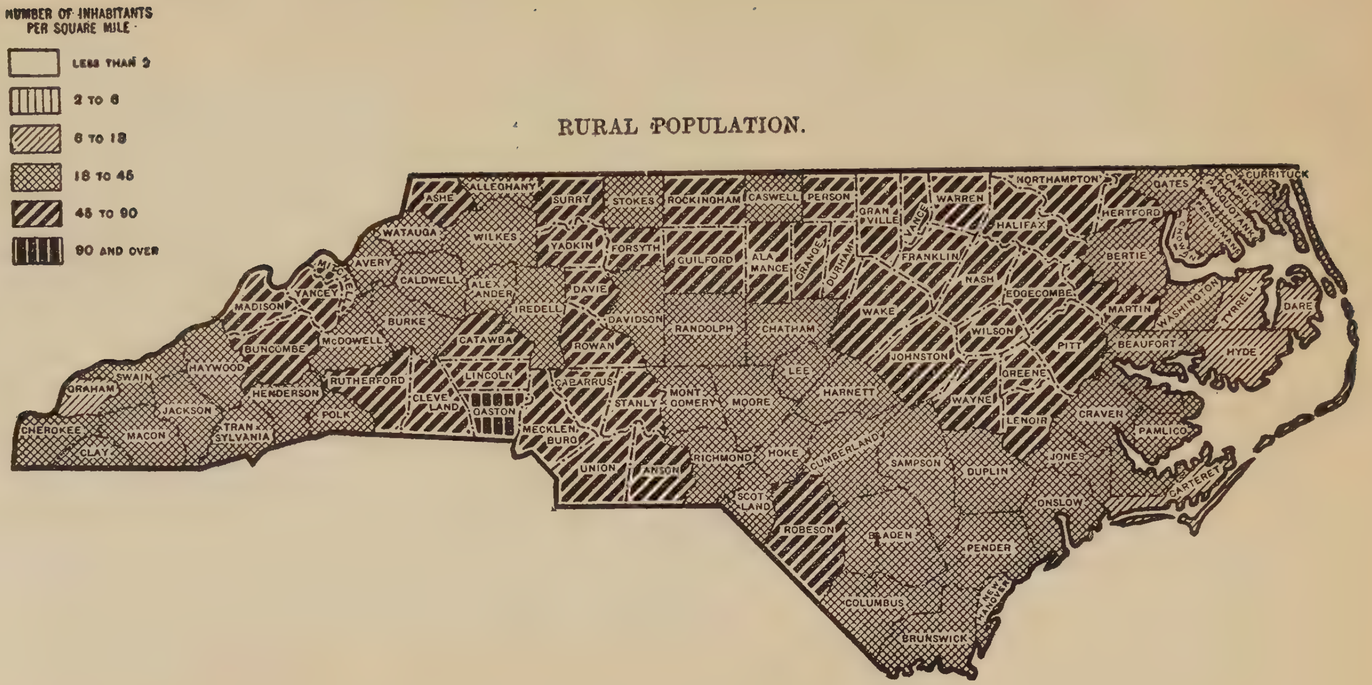
DENSITY OF POPULATION OF NORTH CAROLINA, BY COUNTIES: 1920

Rural population is defined as that residing outside of incorporated places having 2,500 inhabitants or more.

TOTAL POPULATION
(1920 Census of Population)


ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
VANCE
WARREN
NORTHAMPTON
GATES
CAMDEN
CURRITUCK
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
BERTIE
MITCHELL
AVERY
CALDWELL
ALEXANDER
DAVIE
NASH
EDGECOMBE
WASHINGTON
TYRRELL
DARE
YANCEY
MADISON
BURKE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
MARTIN
BUNCOMBE
McDOWELL
CATAWBA
ROWAN
WILSON
PITT
BEAUFORT
HYDE
HAYWOOD
SWAIN
GRAHAM
LINCOLN
CABARRUS
LEE
JOHNSTON
GREENE
RUTHERFORD
HENDERSON
HARNETT
CLEVELAND
STANLY
MONTGOMERY
MOORE
WAYNE
CHEROKEE
JACKSON
POLK
GASTON
LENOIR
CRAVEN
TRANSYLVANIA
MACON
CLAY
MECKLENBURG
PAMLICO
HOKE
CUMBERLAND
JONES
UNION
ANSON
RICHMOND
SAMPSON
DUPLIN
ONSLOW
CARTERET
SCOTLAND
ROBESON
BLADEN
PENDER
COLUMBUS
NEW HANOVER
BRUNSWICK

RURAL POPULATION.


NUMBER OF INHABITANTS PER SQUARE MILE
LESS THAN 2
2 TO 6
6 TO 18
18 TO 45
45 TO 90
90 AND OVER
ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
VANCE
WARREN
NORTHAMPTON
HERTFORD
GATES
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
CURRITUCK
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
HALIFAX
BERTIE
MITCHELL
AVERY
CALDWELL
ALEXANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MADISON
YANCEY
BURKE
McDOWELL
CATAWBA
ROWAN
WILSON
PITT
BEAUFORT
HYDE
BUNCOMBE
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
LINCOLN
CABARRUS
JOHNSTON
LEE
GREENE
HENDERSON
JACKSON
POLK
CLEVELAND
GASTON
STANLY
MONTGOMERY
MOORE
HARNETT
WAYNE
LENOIR
CRAVEN
PAMLICO
CHEROKEE
MACON
TRANSYLVANIA
CLAY
MECKLENBURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
CARTERET
ONSLOW
SCOTLAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

Assuming that the above trend has continued since 1920, the rural population (population outside of places above 2,500 inhabitants) is now approximately 75 per cent of the total population, or about 2,250,000 inhabitants.

And finally, North Carolina is one of the very few states, and the only important industrial state, that does not have an outstanding city. The largest city in the state had a population estimated at 82,100 on July 1, 1928. The second largest city is only a few hundred inhabitants behind. A large part of our industrial development is found in small towns, much of it altogether outside of incorporated places.[5]

Regions of Increasing Sparsity

But while the country population of the state as a whole was increasing 9.5 per cent during the last ten years, 19 country counties and 308 country townships suffered population decreases ranging from one to 31 per cent. Nearly a fifth of all our counties and nearly a third of all our townships lost population in 1910-20. Almost without exception they are remote and lonely country counties, or remote and lonely country townships in wide-awake counties. In the main their population losses are due (1) to sparsity of population, poor roads, and poor schools, (2) to inability to organize for business and social advantages, and (3) to the attractions of industrial and urban centers with their offers of livelier existence and larger amounts of wage money for weekly fingering.

The 19 dwindling country counties of the state and their ten-year losses of population are: Alleghany 4.4 per cent, Camden 4.8 per cent, Carteret 31.3 per cent, Chowan 5.8 per cent, Currituck 5.5 per cent, Haywood 0.5 per cent, Hyde 5.1 per cent, Iredell 2.2 per cent, Lee 8.4 per cent, Lincoln 16.5 per cent, Madison 0.7 per cent, Montgomery 2.4 per cent, Pamlico 9.1 per cent, Pender 4.4 per cent, Randolph 4.0 per cent, Richmond 2.2 per cent, Rowan 8.9 per cent, Scotland 15.7 per cent, and Tyrrell 7.1 per cent.

The 308 dwindling townships lie in 90 of our 100 counties. The state over, there were only 10 counties that did not have one or more townships decreasing in population during the last 10 years. Forty-one counties lost population in a third or more of all their townships.[6]

Some Social Consequences of Excessive Ruralism

The economic consequence of an excessive rural ratio is, of course, an ill-balanced economy. There have been, and still are, too many producers of raw products and too few urban consumers. Thus our farmers have always had to produce for the market those things which could be marketed outside the state, mainly cotton and tobacco. Our growing towns and cities are offering ever widening opportunities for farmers to find local markets for food and feed crops and livestock products, and slowly they are beginning to capitalize on their new opportunities.[7] Our main interest at this time is briefly to inquire into some social consequences of excessive ruralism.

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[5] North Carolina has the largest unincorporated town in the United States, a privately owned textile center.

[6] *News Letter,* vol. VIII, no. 6.

Rural Mindedness. Rural minded characteristics, needless to say, are acquired characteristics. Rural mindedness grows out of (1) the sparsity of population and (2) the nature of farming as an occupation. Our farm people in North Carolina and throughout America live on solitary farmsteads, a few people to the square mile, and not in villages as in Old World countries. This sparsity of population is a denial of the fundamental social instinct, the craving for companionship. Agriculture as a business has three outstanding characteristics: (a) it deals with nature directly; (b) it is a solitary occupation; and (c) it is small-scale production. Dr. Branson, in discussing excessive ruralism[8] in North Carolina says:

> In agriculture the producing unit is the farm family, and our farm families are scattered throughout the vast open spaces of North Carolina, not in farm communities, but in solitary dwellings, only seven to the square mile the state over, fewer than four to the square mile in 10 counties, and fewer than 17 in our most populous county. They were settled in social insulation in earlier times, and so they remain to this good day. Agricultural production is small-scale production by small producing groups that are or may be self-sufficing, existence necessities considered. The inward urge to mass organization for business or social or civic advantage is therefore feeble, and the result has been poor country roads, poor country schools, and excessive illiteracy, inadequate attention by country people to health and sanitation, an inadequate sense of civic as well as social responsibility in local areas, honest but inefficient and wasteful county government as a rule, and, all in all, small-scale thinking about the big-scale concerns of the commonwealth. . . .
>
> The glory of North Carolina lies in the fact that it has always been a land of free democracy—unpurchasable and unroutable, unafraid and unabashed. We have always been what Emerson celebrated —free, unterrified American citizens. But also it is a land of overweening individualism, and imperious localism. It has always been so and inevitably so, because our civilization has been rooted in ruralism. . . . The excessive private-local public laws of the state perfectly express the dominant private-local mindedness of North Carolina.

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[7] Discussed more fully in chap. VI.

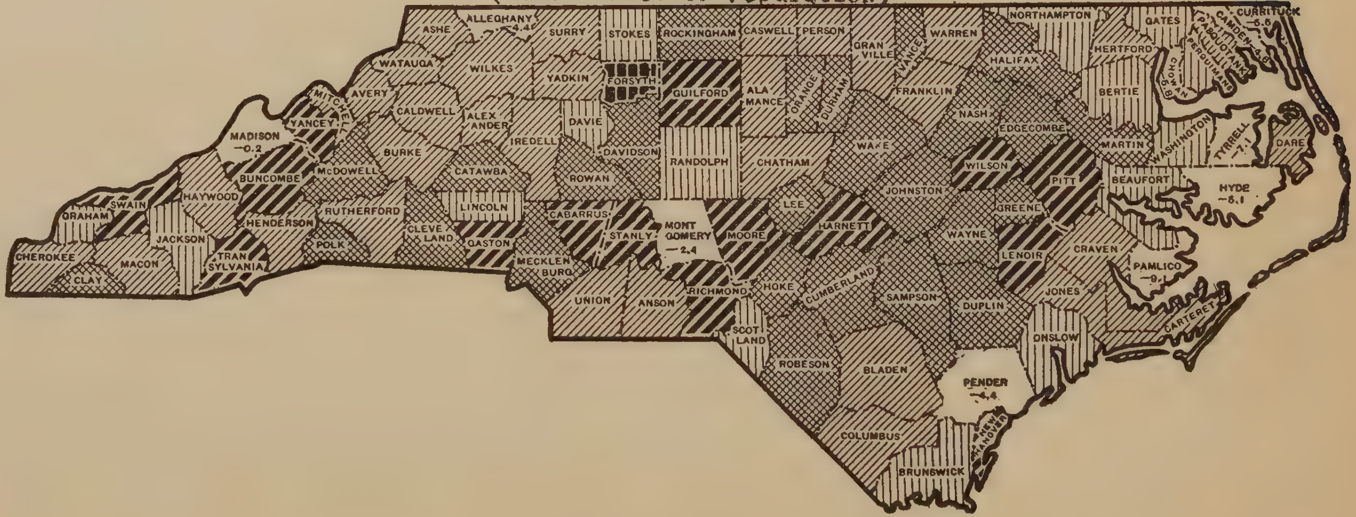
[8] "The New Day in North Carolina," address before State Social Service Conference, Raleigh, Jan. 25, 1921. Printed in *News Letter,* vol. VII, no. 13.

PER CENT OF INCREASE OR DECREASE OF POPULATION OF NORTH CAROLINA, BY COUNTIES: 1910-1920

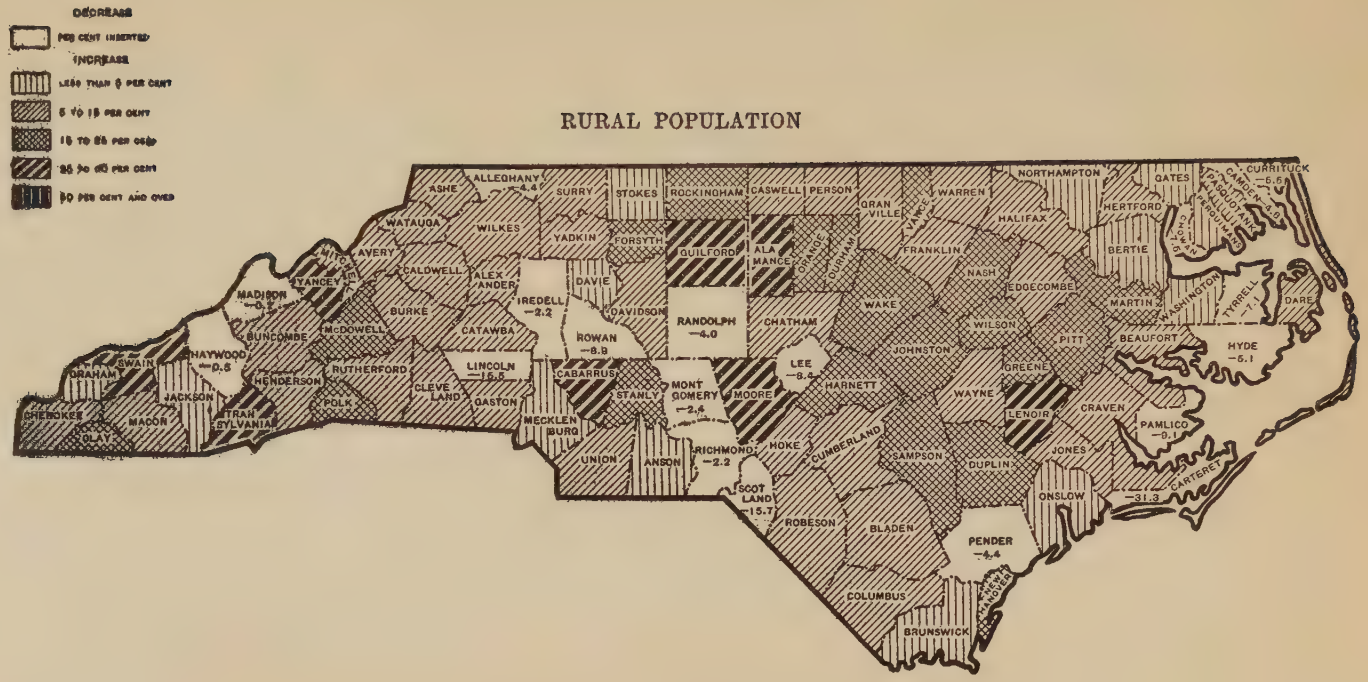
Rural population is defined as that residing outside of incorporated places having 2,500 inhabitants or more.

TOTAL POPULATION

(1920 Census of Population)


CHEROKEE
CLAY
GRAHAM
SWAIN
MACON
JACKSON
HAYWOOD
TRAN SYLVANIA
MADISON —0.2
BUNCOMBE
HENDERSON
YANCEY
MITCHELL
AVERY
WATAUGA
ASHE
ALLEGHANY —4.4
McDOWELL
RUTHERFORD
POLK
BURKE
CALDWELL
WILKES
SURRY
ALEX ANDER
CATAWBA
CLEVE LAND
LINCOLN
GASTON
IREDELL
YADKIN
DAVIE
STOKES
FORSYTH
ROWAN
DAVIDSON
CABARRUS
MECKLEN BURG
UNION
STANLY
ANSON
ROCKINGHAM
GUILFORD
RANDOLPH
MONT GOMERY —2.4
RICHMOND
MOORE
SCOT LAND
CASWELL
ALA MANCE
ORANGE
DURHAM
PERSON
CHATHAM
LEE
HOKE
ROBESON
GRAN VILLE
VANCE
WARREN
FRANKLIN
WAKE
HARNETT
CUMBERLAND
BLADEN
COLUMBUS
NORTHAMPTON
HALIFAX
NASH
JOHNSTON
SAMPSON
WILSON
EDGECOMBE
WAYNE
DUPLIN
PENDER —4.4
BRUNSWICK
NEW HANOVER
GREENE
LENOIR
PITT
JONES
ONSLOW
CRAVEN
GATES
HERTFORD
BERTIE
MARTIN
BEAUFORT
PAMLICO —9.1
CARTERET
CHOWAN 6.8
PERQUIMANS
PASQUOTANK
CAMDEN —4.9
CURRITUCK —5.6
WASHINGTON
TYRRELL —7.1
DARE
HYDE —6.1

RURAL POPULATION


DECREASE
PER CENT INSERTED
INCREASE
LESS THAN 5 PER CENT
5 TO 15 PER CENT
15 TO 25 PER CENT
25 TO 50 PER CENT
50 PER CENT AND OVER
CHEROKEE
CLAY
GRAHAM
SWAIN
MACON
JACKSON
HAYWOOD
—0.5
TRANSYLVANIA
MADISON
—0.2
BUNCOMBE
HENDERSON
YANCEY
MITCHELL
AVERY
McDOWELL
POLK
RUTHERFORD
BURKE
CALDWELL
WATAUGA
ASHE
ALLEGHANY
—4.4
WILKES
ALEXANDER
CATAWBA
CLEVELAND
LINCOLN
—15.5
GASTON
IREDELL
—2.2
SURRY
YADKIN
DAVIE
ROWAN
—8.9
MECKLENBURG
CABARRUS
UNION
STOKES
FORSYTH
DAVIDSON
STANLY
ANSON
MONTGOMERY
—2.4
RICHMOND
—2.2
ROCKINGHAM
GUILFORD
RANDOLPH
—4.0
MOORE
SCOTLAND
—15.7
CASWELL
ALAMANCE
ORANGE
DURHAM
PERSON
CHATHAM
LEE
—8.4
HOKE
ROBESON
GRANVILLE
VANCE
WARREN
FRANKLIN
WAKE
HARNETT
CUMBERLAND
JOHNSTON
NASH
WILSON
WAYNE
SAMPSON
BLADEN
COLUMBUS
BRUNSWICK
NORTHAMPTON
HALIFAX
EDGECOMBE
GREENE
LENOIR
DUPLIN
PENDER
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NEW HANOVER
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JONES
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CRAVEN
GATES
CHOWAN
—7.6
PERQUIMANS
PASQUOTANK
CAMDEN
—4.8
CURRITUCK
—6.6
WASHINGTON
TYRRELL
—7.1
DARE
BEAUFORT
HYDE
—5.1
PAMLICO
—9.1
CARTERET
—31.3

The rural mind is private and local—almost inescapably so. And the culture of the countryman has long been the main-spring and the measure of our civilization. As the countryman thinketh in his heart, so are we in North Carolina—or so it long has been. Both the best and the worst of us lies in this fundamental fact.

Dr. Branson lists the outstanding rural characteristics as (1) individualism, (2) social aloofness, and (3) non-coöperativeness. There is abundant evidence that these characteristics exist in North Carolina, especially in the fields of law and order, in business enterprise, in social effort, in public health activities, and in religious consciousness. Excessive illiteracy and near-illiteracy[9] are partly products of our individualism and other rural characteristics. Reducing illiteracy and near-illiteracy rates is exceedingly difficult in remote rural areas where the bulk of illiteracy is located.

Blind-tigering is another evidence of the individualism of our rural people. Court records show that moonshining is carried on by our farmers, mainly by our tenant farmers. North Carolina, if not the nation's leading moonshine distillery state, is the second ranking state.[10] One may almost say that the only really important agricultural industry in North Carolina is the illicit manufacture of corn liquor. Officially it is not an industry, but actually it is a whale of a business, the value of output running into high figures.

Homicides and other crimes of violence, or crimes against persons, are rural crimes. North Carolina makes a bad showing in homicides. Actually more murders occur in North Carolina annually than occur in Chicago,[11] which has become noted for its high murder rate. Chicago's fame is due to the press and to the interesting technique developed by her gangland murderers. A North Carolina county is said to have led the United States in homicides over a four-year period,[12] and this same county always contributes its quota of annual killings. An exhaustive study of our Superior Court cases[13] shows that crimes against persons are committed generally by farm people, while crimes against property are committed generally by urban people.

Over-churched country areas are evidence of individualism or non-coöperativeness. There are a great many communities in the state in which are to be found four or five half-dead country churches, kept feebly going by excessive individualism. The country churches far outnumber the country schoolhouses.

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[9] For facts see chap. XVI.

[10] North Carolina and her daughter, Tennessee, alternate in leadership. Georgia also ranks near the top.

[11] A recent report of the State's Attorney General showed approximately 700 people tried for murder in one year. A check shows that our murders are usually committed by country people who fall out over small things, or who commit murder while under the influence of whiskey.

[12] Robeson County, 1910-14.

[13] By the Institute for Research in Social Science, University of N. C.

Weak civic and social responsibility is found in rural North Carolina as in other rural areas. There is on our statute books, for instance, an excellent law providing for rural township incorporation or for incorporated rural communities, but the latest check showed only two communities in the entire state taking advantage of this law.

It is notorious that coöperative marketing associations have been unable to make much headway in the state. The tobacco association failed to live through its contract, while the cotton association handles only about 8 per cent of the state's cotton crop. The credit union law has been on the statute books since 1915, but the farmers have made little or no use of this excellent provision for better credit facilities.

It is not implied that country-mindedness is altogether bad. There are certain advantageous aspects of it. It is usually asserted that independence, originality, and initiative are open-country products. Our country regions have contributed many leaders. On the other hand, it is claimed that not an outstanding man has sprung up out of our textile mill population.

The family as a strong social institution is preserved in the open country. North Carolina, excessively rural, has almost the lowest divorce rate in the United States, ranking usually from forty-fifth to forty-seventh. The counties of the state rank in divorces about as they rank in urban ratios, which is even better proof of the correlation between divorces and urban ratios, since the same laws are in force throughout the state.

URBANIZATION

While it is true that North Carolina has always been predominantly rural and is still one of the most rural states, there has been a remarkable urbanization trend during the last two decades or so, especially in the Piedmont country, a result of the industrial development that has taken place in the state.

In 1880 Wilmington, with 17,350 inhabitants, was our only town of respectable size. No other town had as many as 10,000 inhabitants. As late as 1900 there were only 27 towns in the state with as many as 2,500 inhabitants. In 1920 there were 57 such towns, and there are probably 80 at present. Between 1910 and 1920 the population in towns above 2,500 inhabitants increased 54 per cent, or nearly four times as rapidly as for the state as a whole.

Speaking eight years ago, Dr. Branson said:

> North Carolina is at last moving into the flood tide of modern

industrialism—belatedly to be sure, but with marvelous speed since the early eighties. We have long been rural, but ten years ago we were being urbanized more rapidly than 36 other states of the Union, and the cityward drift has been immensely accelerated of late by the expulsive power of country life on the one hand and the attractive power of industrial centers on the other.

The transformation has been wrought in quite unconscious response to the elemental urges of life and livelihood during the last few years—mainly the last five years. Agriculture has given place to manufacture as the primary interest of North Carolina. A machine-made civilization is conditioning and supplanting the oldtime homespun, hand-made civilization of the state. The day of great cities is at hand, and the fullness of their greatness in the coming years does not yet appear. Out of fractional we have moved into integral suffrage and sovereignty. Out of private-mindedness we are moving into civic and social-mindedness; out of pinching poverty into abundant wealth; out of small-scale into big-scale thinking about the vital matters of a noble civilization.[14]

The 1920 Census facts of our urban population are completely out of date. At best they serve only to show the urban trend and enable the making of estimates of our present urban population. The 1920 Census gave the urban population[15] as 490,370, or 19.2 per cent of the total population. In 1910 the per cent urban was 14.4. If the urban trend has continued at the 1910-1920 rate, the urban population is now approximately 750,000, or 25 per cent of the total population. The urban population increased 54 per cent between 1910 and 1920. If we assume that the increase has continued at the same rate, the result is approximately the same. The rural population, therefore, is approximately 2,250,000, or 75 per cent of the total population, of which approximately 1,600,000 live on farms, leaving approximately 650,000 inhabitants living in places below 2,500 inhabitants but not on farms. The large number of people living in the twilight zone is due to the fact that much of our industrial development is on the outskirts of incorporated places, a considerable part of it in unincorporated open country mill villages.

The following table shows the census population of our principal cities for 1910 and 1920,[16] together with an estimate[17] of their population for 1929:

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[14] *News Letter,* vol. VII, no. 13.

[15] Population in places above 2,500 inhabitants.

[16] All cities which in 1920 had more than 5,000 inhabitants, and Hendersonville.

[17] By R. M. Archer. His estimates are practically the same as those of the Census Bureau for cities estimated by the Census Bureau. For a few places the estimates appear a little high.

City	1910	1920	1929
Asheville	18,762	28,504	48,457
Burlington	4,808	5,952	12,499
Charlotte	34,014	46,338	83,408
Concord	8,715	9,903	15,042
Durham	18,241	21,719	48,868
Elizabeth City	8,412	8,925	12,049
Fayetteville	7,045	8,877	16,334
Gastonia	5,759	12,871	23,168
Goldsboro	6,107	11,296	16,944
Greensboro	15,895	19,861	52,900
Greenville	4,101	5,772	7,215
Henderson	4,503	5,222	7,311
Hendersonville	2,818	3,720	11,600
Hickory	3,716	5,076	8,629
High Point	9,525	14,302	32,895
Kinston	6,995	9,771	14,657
Lexington	4,163	5,254	.....
New Bern	9,961	12,198	15,247
Raleigh	19,218	24,418	42,243
Reidsville	4,828	5,333	.....
Rocky Mount	8,051	12,742	24,210
Salisbury	7,153	13,884	21,104
Statesville	4,599	7,895	19,735
Wilmington	25,748	33,372	43,384
Wilson	6,717	10,612	21,224
Winston-Salem	22,700	48,395	85,175

In the above list are to be found some of the most rapidly growing cities (on a percentage increase basis) in the United States, notably Winston-Salem, Greensboro, Charlotte, Gastonia, Asheville, and Durham. Since 1920 several North Carolina cities have practically doubled their official populations simply by extending their corporate limits to include the industrial groups and the new suburban residents. The 18 largest cities in the state had a total population of 347,988 in 1920. The estimated population for these same cities in 1929 is 617,309, a nine-year increase of 77.3 per cent. Much of this increase is the result of extending the corporate limits of several of our cities. However, the real increase has been very substantial since 1920.

In addition to the above cities there were 28 towns which in 1920 had a population ranging from 2,500 to 5,000. Several of these places now have in the neighborhood of 10,000 inhabitants, while since 1920 a large number of towns have graduated into census-size places. The number of places below 2,500 inhabitants probably has not increased much beyond 414, the number in 1920.[18]

Further light is thrown upon the rapidity of our urbanization movement by the following table,[19] which compares total population increases with gainfully employed. It will be noted that the groups making healthy increases are urban occupation groups.

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[18] There were 413 such places in 1910. The number of new towns below census-size is offset by losses due to towns graduating into census-size places.

Groups	Numerical Increase 1910-1920	Per Cent Increase 1910-1920
Population Increase	352,836	16.0
57 Census-size Towns	171,896	54.0
414 Sub-census-size Towns	22,271	9.4
Open Country	158,669	9.2
Mill Workers	74,175	54.0
Merchants and Bankers	16,324	44.0
Professional Workers	12,534	73.0
Clerical Workers	10,260	101.0
Officeholders, State and Federal	6,403	247.0
Miners and Quarrymen	1,050	110.0
	Numerical Decrease 1910-1920	Per Cent Decrease 1910-1920
Farmers and Foresters*	134,024	22.0
Domestic and Personal Servants	10,589	15.0

* The decrease was due in part to date of taking the 1920 Census, January, and to decline of North Carolina as a lumber state. Farms increased, but probably farm workers did not increase.

Our Small Towns

The small town refers to places with fewer than 2,500 inhabitants. In 1920 there were 414 such places in North Carolina. The average population of our small towns was a little less than 600 inhabitants. The total population of these 414 towns was 241,000 in round numbers, which means that our small towns contain a little less than one-tenth of the population of the state.

An analysis of the census data shows that the total increase in population of our small towns between 1910 and 1920 was approximately 22,000, or 9.4 per cent. The rate of growth was only one-sixth the rate of our towns above 2,500 inhabitants. The average growth per town per year was slightly more than five people, or one average size family!

Ninety-three of our small towns actually decreased in population, and 40 other towns that were incorporated in 1910 had surrendered their charters by 1920. Most likely these latter towns had suffered excessive losses of population. Assuming that these towns did lose population, 133 or almost exactly one-third of our little towns suffered population losses during the last census period. These drowsy little towns are to be found all over the state, but relatively more of them are in the Tidewater country than in any other region.

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[19] Based on 1910 and 1920 censuses. For detailed analysis see *North Carolina: Industrial and Urban.*

It is a matter of observation that thousands of people have left the small towns for the larger places. Also the country dwellers, when they decide to leave the country, move with a hop-skip-and-a-jump over the small towns and into the larger places. "They go over the little country towns like sheep over a low gap in a fence." When townspeople move from one town to another town, they usually move to a larger town.

Observation shows that the trend since 1920 has been similar to the trend during the previous decade. If anything, the great development of highways that has taken place in the state since 1921 has accelerated the growth of large towns and has slowed down the growth of many small places. A few small towns undoubtedly have been helped by good highways, but primarily our small towns are trade centers, and modern highways and automobiles make it easy for farm people, and even the small town residents, to travel greater distances to the larger towns to do their buying and selling. For instance, approximately half of the state's tobacco crop is now marketed in three large towns. The small tobacco markets cannot compete with the large centers, and therefore they are closing out. It is easy, as well as a common practice, for farmers to take their tobacco from the eastern part of the state to Durham or to Winston-Salem. The 1930 Census will probably show that modern highways and the motor car have rung the death knell for many small trade centers over the state. It is the motor car, and not the horse and buggy, that today determines how far apart healthy trade centers must be located. Small towns will continue to get the trade of the "skims," but not the cream of the trade. The population drift spells the doom of the little towns unless they have (a) the enterprise to establish industrial plants, or (b) the public spirit to become the most beautiful and attractive residence centers on the face of the globe.[20]

There is real hope for a large number of small towns in North Carolina due to the fact that industry is not concentrated, but widely dispersed. In the Piedmont region, especially, nearly every town, large or small, has some industrial development. Usually it is a textile mill. Often there are other industries. The small industrial plants widely scattered over the Piedmont country characterize our industrial development and are the hope of these small towns.

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[20] Branson, *News Letter,* vol. VII, no. 4.

In analyzing the economic foundations and prospects of our towns, large and small, Dr. Branson says:

> A city, or a small town with prospects of growing into city proportions, sits on a four-legged stool, so to speak, and the legs of this stool are: (1) farming and other country occupations that produce raw materials, (2) manufacture, (3) trade and transportation, and (4) banking. And it sits insecurely if any one of these supports be infirm.
>
> A country market town sits up on a three-legged stool and the legs of it are: (1) the surrounding countryside, (2) trade, and (3) banking. And it sits insecurely if its back-country is an agricultural area diminishing in population or in prosperity—if its attitude toward the trade territory be indifferent or supercilious, or exacting and grasping—if it is content to take interest from farmers rather than interest in farmers—if it is unconcerned about progress and prosperity in the nearby country regions, in better country roads, better country schools, and better supported country churches—if its tax moneys go to support its own schools, libraries, and public health activities, with little or no thought of sharing these freely with the country homes round-about—if its banks be of the spider-web instead of the honey-bee variety. Large or small, no town or city can grow fat in a lean countryside. Neither individuals nor communities can safely live unto themselves alone.
>
> Here and there, in this and every other state, are small towns that are trying to balance on two-legged stools of this sort—a feat that only acrobats are equal to. With the farm leg gone, they are teetering on trade and banking as town supports. They are towns without an economic basis in agriculture or manufacture—in which, as the wits say, everybody tries to make a living by taking in everybody else's washing.[21]

The Look Ahead

So far it has been shown that North Carolina throughout her history has been a rural state and still is predominantly rural; that the state is becoming urbanized very rapidly, urbanization being the product of our belated, but very positive, move into industry; and, finally, that our small towns are experiencing retarded population growth, something like a third of them actually losing population. It seems in order to attempt to evaluate the trend and to indicate the future prospects.

The state is still predominantly rural, having a farm population ratio more than twice as large as the national average. The prospects are that our farm population ratio will continue slowly to decline, but not at the rate of decline for the nation. In other words, North

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[21] Branson, *News Letter,* vol. VII, no. 6.

Carolina for long years to come will have a large farm population ratio and a large total farm population. The city population will continue to grow at a rate far above the growth for the state as a whole, but the prospects of a rural ratio as low as the national average are remote indeed. Our small towns will probably grow at about the rate of progress made by the surrounding trade territory. The per cent of population living in small towns likely will continue to decline.

North Carolina likely will never have a large city because there is no one place that has any marked advantage with respect to location. The state has a large number of healthy-sized competing towns, which, all things considered, is fortunate.

The accelerated growth of our towns and cities is well for the state, socially as well as economically. Urban drift temporarily may hurt certain rural regions, but those who decry the urban trend in North Carolina express their sentiment more than their judgment. North Carolina has been top-heavy on the rural side. She is gradually becoming a better balanced state. For the first time in our history our farmers can begin to diversify and find local markets for their surplus food and feed products, as well as for the non-food cash crops that the old conditions forced them to grow.

Well or ill, the cityward drift will continue. It is not a local but a world-wide movement. The problem is not to turn people back to the farm or to keep people from leaving the farm, but to make farm life efficient, prosperous, satisfying and wholesome for country-minded people who choose to live in the country. There are now and will always be many country-minded people in every state and nation, but at present they are being driven out of the country by unendurable conditions, economic and social.[22]

Since 1912 the per capita wealth of North Carolina has increased faster than that of any other state. Due to increased wealth we have been able to increase our governmental expenditures. Our rank in public education has moved up from forty-eighth to perhaps thirty-ninth at present. Due to increased wealth and economic necessity North Carolina has been able to build a system of highways that compare favorably with the best the nation has to offer. Such rapid strides have been made in the fields of public health and public welfare that North Carolina's high standing in these social fields is publicly recognized. President Herbert Hoover says that North Carolina has made more progress during the last fifteen years than any other state. Such progress could not have been made under the old order of dominant ruralism. The bulk of our people still live on the farm, but the bulk of our wealth, produced and retained, is urban wealth. North Carolina has moved ahead of other southern states because she has had the good fortune to attain a better-balanced economy. Excessive ruralism is not good even for rural people. The hope of rural life in North Carolina lies in further urbanization, provided farmers have the sense to take advantage of the new opportunities. Rural social conditions may stagnate in regions of excessive urbanization, but most certainly it is not necessary that they should do so. Rural social conditions are now at their lowest ebb in areas of excessive ruralism. They can be at their best only in areas of balanced economy. The last quarter-century has brought about a much better balanced economy in North Carolina, and therein lies the explanation of her ability to function on higher levels than is possible in southern states that still depend upon agriculture as the main source of income.

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[22] *Loc. cit.*

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News Letter, vol. VII, nos. 4, 6, 13; vol. VIII, no. 6; vol. IX, no. 33.

North Carolina: Industrial and Urban, North Carolina Club Year-Book, 1920-21, Chapel Hill.

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The Library of the Rural Social-Economics Dept. has a number of laboratory studies by its students, as well as much rural population information.

CHAPTER XIII

STATE GOVERNMENT

This Chapter will deal entirely with the organization and fiscal affairs of the state government. Certain major state activities such as public health, public welfare, public education, conservation and development, and highways are discussed elsewhere. The following[1] is a brief account of the organization of our state government:

Constitution.—The government of North Carolina, like that of the United States and all other states in the Union, is a constitutional democracy. While the federal government is one of granted powers, having only such powers as are given in the Federal Constitution, the state has all the essential powers of government to be exercised by the people through their representatives, except such power as may be limited by the Federal or the State Constitution.

The present Constitution was adopted in 1868, and provides for amendment (1) by a convention composed of representatives elected by the people for that particular purpose, or (2) by an act of the General Assembly proposing certain amendments to take effect when ratified by the popular vote. Various amendments have been adopted by the latter method since the Constitution went into effect, the most important involving the system of county and municipal government, the right of suffrage, and the power of taxation.

The Constitution contains a bill of rights defining and protecting certain popular rights, privileges, and liberties; provides for the three grand divisions of government—legislative, executive, and judicial—and the organization of each; regulates the power of taxation, the right of suffrage, and the creation of county and municipal governments; provides for a system of public schools and for higher educational institutions; regulates the punishment for crime and the care and control of convicts; provides for the support of the poor and unfortunate; authorizes a lien for laborers and mechanics, and creates a personal property and homestead exemption for the judgment debtor.

Legislative Department.—The legislative department consists of the Senate and the House of Representatives, the Senate being composed of fifty members representing different districts containing one or more counties, and the House of Representatives consisting of one hundred and twenty members, one from each county and two or more from the larger counties. The senators and representatives are elected by popular vote to serve for two years and receive as compensation for their services ten dollars a day for a sixty-day session and ten cents a mile for the distance traveled in attending the session.

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[1] This brief summary is based on an article by Professor A. C. McIntosh of the University of North Carolina Law School, in *North Carolina: The Land of Opportunity.*

The legislature meets biennially in the city of Raleigh, on the first Wednesday after the first Monday in January after the election, to continue in session sixty days with pay and longer without pay. It may also meet in special session at the call of the Governor, to remain in session twenty days. The Lieutenant-Governor is *ex officio* president of the Senate, and the House of Representatives elects its own speaker or presiding officer. Each House keeps a journal of its proceedings, which is published after adjournment.

All bills enacted into laws must be read three times in each House and be signed by the presiding officer of each House. In addition to this, all bills which pledge the credit of the state or of any subordinate division of the government, or authorize the levy of a tax, must be read three times and on three separate days in each House, and upon the second and third readings the ayes and noes must be taken and entered upon the journals.

Executive Department.—The executive department consists of the Governor, Lieutenant-Governor, Secretary of State, Auditor, Treasurer, Superintendent of Public Instruction, and Attorney-General, who are elected by popular vote for a term of four years; and the Governor and Lieutenant-Governor are not eligible for reëlection to two successive terms.

The Governor is the chief executive officer of the state, and as head of the military power of the State he may use that power when necessary for the proper enforcement of law and for the protection of the lives and property of the citizens. It is his duty to furnish to the legislature from time to time information in regard to the public interests, and to recommend to the legislature such measures as he may deem expedient. He may call the legislature in special session whenever he considers that the public interests require it; but he cannot control legislation and has no veto power. [The 1929 legislature established the office of Executive Counsel, the officer to be appointed by the Governor.] The Lieutenant-Governor is the presiding officer of the Senate, and upon the absence or incapacity of the Governor, or in case of a vacancy in that office, he succeeds to the office of Governor.

There are other departments of the state government, created by legislation for administrative purposes, whose powers and duties are prescribed in the act creating them. These are the Board of Agriculture, with the Commissioner of Agriculture in charge of the business; Corporation Commission; State Board of Charities and Public Welfare; State Board of Education; State Board of Elections; [Board of Conservation and Development, with a director in charge;] Insurance Department, with the Insurance Commissioner in charge; Board of Internal Improvements; State Board of Health; Department of Labor and Printing; State Budget Commission; State Highway Commission; State Department of Revenue, with the Commissioner of Revenue in charge.

Judicial Department.—The judicial department consists of the Court of Impeachments, Supreme Court, Superior Court, Justices of the Peace, and such other inferior courts as may be established. The Senate is the Court of Impeachment, presided over by the Lieutenant-Governor, except when the Governor is impeached, and then by the Chief Justice of the Supreme Court. Charges as a ground for impeachment are presented and prosecuted by the House of Representatives.

The Supreme Court is composed of a chief justice and four associate justices, who are elected by popular vote for a term of eight years. The court meets twice a year in the city of Raleigh, in February and August, and continues in session until the business of the term is finished. It has original jurisdiction of all claims against the state, and appellate jurisdiction of all cases coming up for review from the lower courts through the Superior Court. At the beginning of each term the Court holds an examination for applicants to practice law, and grants a license to those satisfying the conditions for admission.

The state is divided into two judicial divisions—eastern and western—with ten Superior Court districts in each. A judge of the Superior Court is elected for each district by the popular vote in the whole state, but the judge must be a resident of the district for which he is elected. The term of office is eight years, and the judges in each division hold the courts of the districts in rotation. Two terms of court are held in each county every year, with additional terms where the business of the county requires it. The Governor may order a special term of court to be held in any county and designate a particular judge to hold it, when the accumulation of business or special circumstances demand it. Emergency judges are also provided for to aid in holding the Superior Courts. . . . A solicitor, or prosecuting officer, is elected for each district for a term of four years whose duty it is to prosecute all cases in the Superior Court for the violation of the criminal law.

The distinction between actions at law and suits in equity has been abolished, and the Superior Court has general jurisdiction in law and equity over all cases which have not been given to the exclusive jurisdiction of some other court. It is a jury court, having the grand jury and trial jury, and the right of trial by jury is preserved in all cases by the right of appeal from the inferior courts to the Superior Court. The clerk of the Superior Court, in addition to keeping the records of that Court, has final jurisdiction in special proceedings and probate matters.

The justices of the peace, who formerly had many administrative duties to be performed in the county court, are now chiefly judicial officers, with civil jurisdiction in contract cases up to two hundred dollars, in tort cases up to fifty dollars, and in criminal cases where the punishment cannot exceed a fine of fifty dollars or imprisonment for thirty days. Recorders' courts were established in some localities by special act of the legislature, generally with criminal jurisdiction and sometimes with civil jurisdiction; and they may now be established in any county or municipality by popular vote. Mayor's courts in municipal corporations have the criminal jurisdiction of a justice of the peace.

COST OF STATE GOVERNMENT

There are only three states in which the per inhabitant cost of operating and maintaining the general departments of state government is less than in North Carolina,[2] the average cost for the year 1927 being $6.31. The cost in the cheapest state was $6.07, or only 24 cents per person lower than in North Carolina. The cost in the highest state, Nevada, was $27.44. The total cost of operating and maintaining the general departments of our state government for that year was $18,142,100. This amount does not include outlays for permanent improvements, which are made from the proceeds of bond sales retired over a period of years. The following items are covered, and states are comparable, as all states carry on these general activities: (1) general government, executive, legislative, judicial; (2) protection to person and property; (3) development and conservation of natural resources; (4) conservation of health and sanitation; (5) highways (about $4,000,000, supervising department and maintenance only); (6) charities, hospitals, and corrections; (7) education; (8) recreation; and (9) miscellaneous, mainly pensions to Confederate soldiers (in North Carolina).

The highway department operates separately from the general fund, but since highway maintenance is an activity of every state government, the amount spent on maintaining our state highways is included in the above amount.

Interest on bonded debt is not included in the cost of operating the general departments of state government, because, due to the variety of purposes for which bonds are issued and the methods of financing them, states are not comparable. For instance, in North Carolina about three-fourths of our state debt has been incurred to construct state highways, which are self-financing, and to lend money to counties for building schoolhouses. The interest is paid by owners of automobiles and by the counties which have borrowed from the state to erect schoolhouses. Actually only about a fourth of the state debt has to be taken care of from the general fund of the state.

The following table shows the per inhabitant cost of North Carolina's state government by years for which the states have been ranked.[3] It is clear from this table that, although the cost per inhabitant has increased, the rank of the state has not varied a great deal, and North Carolina today has almost the cheapest state government in the nation. During the last five years we have dropped from fortieth to forty-fifth place and lack only five cents per inhabitant of having the second cheapest state government.

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[2] Based on Financial Statistics of States. States are ranked in the *News Letter*, vol. XV, no. 10, for 1927 and in previous issues for previous years.

Year	Cost per Inhabitant	Rank
1927	$6.31	45
1926	5.75	47
1925	6.09	42
1924	5.79	40
1923	5.85	40
1919	2.54	47
1918	2.22	47
1915	1.64	47
1912	1.46	47

It is thus seen that for five out of the nine years for which the states have been ranked, North Carolina has ranked forty-seventh, and that our position today is forty-fifth. This is a surprisingly low rank in view of the reputation the state has for its liberal support of state institutions and agencies.

It is generally conceded that our state finances are administered in a most economical and businesslike manner. No state has a better reputation for efficiency, honesty, and integrity in the official family. It is certain that no other southern state has been so fortunate in the choice of state officials. Inefficiency there has been, but no intimation of dishonesty in at least a quarter of a century!

The table on page 224 shows North Carolina's rank in various classifications of state expenditures[4] for the year 1925, when the state ranked forty-second in per capita cost of state government. The per inhabitant expenditures have increased some since 1925, but the rank of the state has declined.

For the fiscal year 1927-28 the total general fund expenditures of the state were $19,299,067. Of this total, $15,356,702 came from legislative appropriations raised by taxation, while the expendable receipts of the various state departments, institutions, and agencies amounted to $3,942,365. The current receipts and expenditures of

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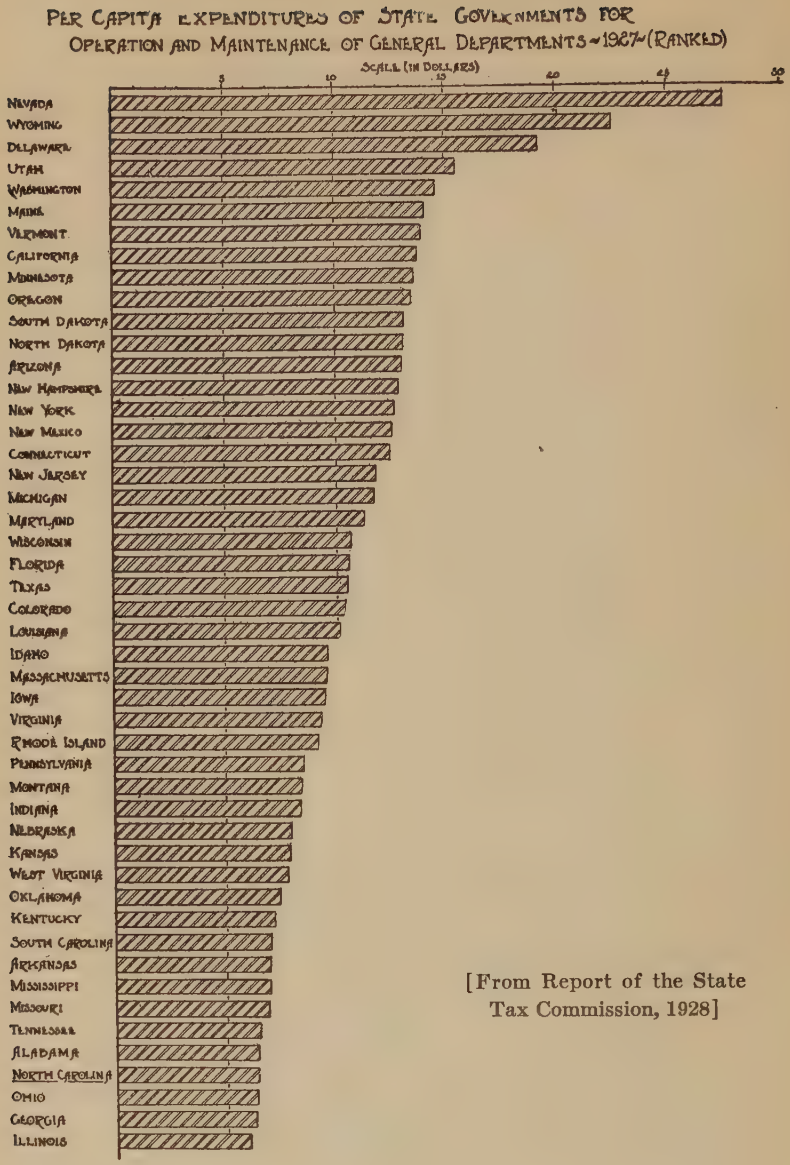
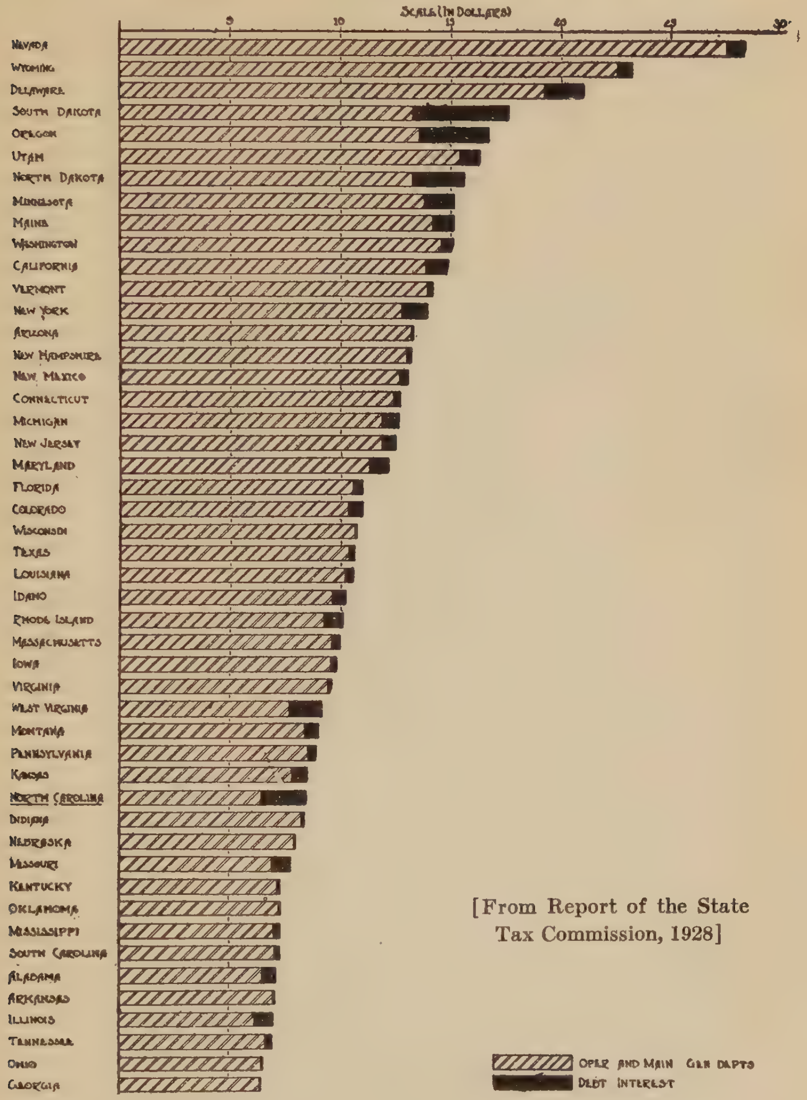
[3] For each year noted above the states have been ranked in this particular by the *News Letter*.

[4] Financial Statistics of States, 1925, tabulated in *News Letter*, vol. XIII, no. 26.



[From Report of the State Tax Commission, 1928]

PER CAPITA EXPENDITURES OF STATE GOVERNMENTS FOR OPERATION AND MAINTENANCE OF GENERAL DEPARTMENTS AND INTEREST ON DEBT - 1927 - (RANKED)



[From Report of the State Tax Commission, 1928]

the highway department amounted to $18,958,432. The highway fund is administered separately from the general fund.

Item	Total Expenditure	Per Inhab. Expenditure	Rank on Per Inhab. Basis
All General Departments	$16,679,744	$6.09	42
General Government	1,463,460	0.53	40
Protection to Person and Property:			
Militia and Armories	132,358	0.05	31
Regulation	325,447	0.12	43
All Other	206,341	0.08	35
Development and Conservation of Natural Resources:			
Agriculture	809,727	0.30	36
All Other (Forests, Fish, Game, etc.)	117,494	0.04	38
Conservation of Health and Sanitation:			
Prevention and Treatment of Communicable Diseases	425,879	0.16	16
All Other	354,436	0.13	22
Highways (Supervising Dept. and Maintenance only)	3,310,684	1.21	26
Charities, Hospitals, and Corrections	3,051,175	1.11	34
Education	5,159,267	1.88	44
Recreation	11,092	0.004	31
Miscellaneous, Mainly Pensions	1,238,204	0.45	24

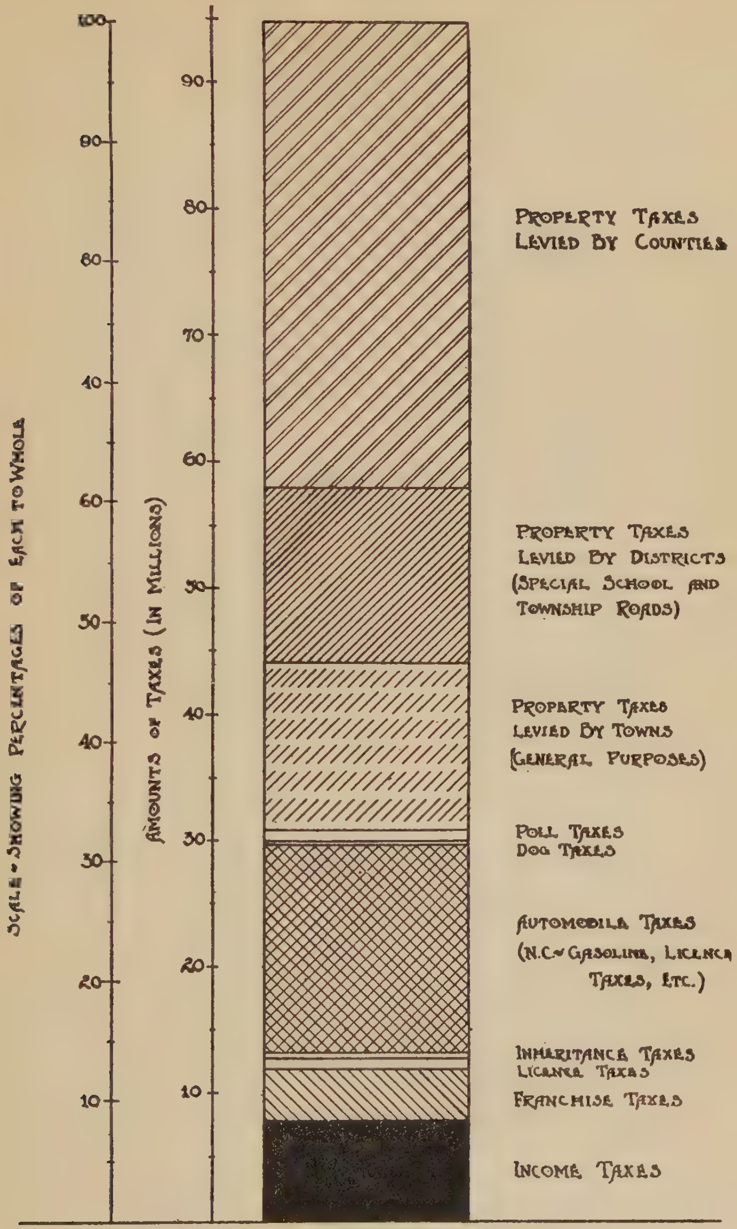
For the biennium 1929-31 the state general fund budget will total around $38,000,000, or $19,000,000 a year. The increased expenditure is due almost entirely to an increase of more than $3,000,000 annually in the school equalization fund.

SOURCES OF STATE REVENUES

North Carolina, along with three or four other states, has no state property tax, this having been discontinued by the 1921 legislature. Our state general fund comes mainly from the following sources: income taxes on individuals and corporations, inheritance taxes, franchise taxes, business and license taxes, and earnings of the general departments and agencies of the state.

Income, inheritance, and franchise taxes are nearly all paid by a certain small group of taxpayers. Business and license taxes are paid by conductors of certain selected business establishments. Earnings of the general departments of the state, except for the insurance and agricultural departments, are not collected from any large number of people. In substance, the bulk of our state government revenue is collected from a very small fraction of our total population. Just

INCOME FROM TAXES IN NORTH CAROLINA ~ SHOWING INCOME TAX IN COMPARISON WITH OTHER SOURCES OF TAX REVENUE ~1928~



[From Report of the State Tax Commission, 1928]

what fraction nobody knows, nor can it be definitely determined. But by the process of eliminating those who do not contribute to the state general fund it can be demonstrated that those who do contribute are relatively few. The bulk of the state revenue comes from owners of our factories, stores, banks, and public utilities, and from individuals with fairly large incomes. They are only a small fraction of our total population.

It is thus clear that the total and per capita state government expenditures are not large, compared with other states. The cost of state government is a heavy burden on the relatively small per cent of the population upon whom the burden directly falls. We have reached the point where the state must change its tax policy or cease to expand its expenditures and functions. There is scarcely any probability that the state will revert to a property tax. It is generally felt that property is already heavily taxed, in order to maintain local governments. If we are to expand the proper functions of our state government, without increasing the burden on those who now bear the brunt of the tax, some way must be found to reach those who lie in between the property taxpayers on the one hand and the income-inheritance-franchise-license group on the other. And there are hundreds of thousands of people in North Carolina who have good incomes, who spend much and live well, and who share the benefits of local and state government, but who pay little direct tax of any sort, and many who pay none at all. This is especially true with reference to state taxpayers. In short, the whole tax system of the state needs to be overhauled and adjusted in terms of the new economic order in the state. Our tax system has been mended and tinkered with in a piecemeal fashion until it is now cumbersome, unwieldy, and inequitable.

In view of the fact that few people outside of the official family know the sources of state revenue, the following table is submitted, which shows sources of general fund receipts for the fiscal year ending June 30, 1927. Earnings of educational and charitable institutions and agencies are not included under miscellaneous, but only interest, fees, and dividends.

The state has around 6,000 corporations, about half of which pay an income tax. Around 65,000 individuals file income tax returns, approximately 25,000 of whom actually pay an income tax. All franchise taxes fall on corporations. Thus it is seen that the bulk of the state revenue comes directly from relatively few individuals, including the owners of the corporations.

SOURCES OF GENERAL FUND REVENUE
YEAR ENDING JUNE 30, 1927

Inheritance—Schedule A		$ 797,697
Licenses—(Inc. B. & L.)—Schedule B		1,261,867
Franchise—Schedule C		3,175,155
Railroads	$ 469,037	
Utilities	203,434	
Express	23,337	
Telegraph, Telephone	213,367	
Foreign Corporations	734,675	
Insurance Premium Taxes	1,235,251	
Licenses	129,013	
Bus Taxes	167,041	
Income—Schedule D		6,236,054
Domestic Corporations	2,308,303	
Foreign Corporations	2,228,508	
Individuals	1,698,457	
Unadjusted Refunds	*6,500	
Penalty Bad Check	786	
Total Under Revenue Act		$11,464,273
Miscellaneous		1,776,710
Insurance Department Fees	14,510	
Secretary of State	124,683	
Governor's Office	14,855	
Gasoline Inspection	500,000	
Oil Inspection	70,000	
Blue Sky	6,120	
R. R. Dividends	254,345	
Interest on Deposits	337,655	
Miscellaneous	2,189	
Incendiary Fire Fund	79,235	
State Prison Earnings	375,430	
Miscellaneous Refunds	*2,312	
Total Revenue		$13,240,983

* Deduct.

STATE GOVERNMENT BONDED DEBT

One decade ago North Carolina had only a small state debt, amounting to $7,601,000 at the end of 1920. Today she has the second largest total, and largest per capita, bonded debt in the United States. The per capita net debt on June 30, 1928, was $54.54.[5] The aggregate funded debt on that date was approximately $170,000,000.[6] Of this total approximately $111,000,000[7] represents highway bonds which will be retired out of the highway system's own special revenues, while nearly $16,000,000 represents loans to counties for school building purposes, which the counties are repaying to the state in annual installments. The state has set aside sinking funds in the form of cash and securities in the total amount of more than $21,000,000 for the repayment of its funded indebtedness. This means that the net debt of our state government is approximately $149,000,000, or was on June 30, 1928.

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[5] A table showing the rank of states in bonded debt appears in the *News Letter*, vol. XV, no. 1.

[6] For the details and distribution of debt see the Budget of the State, pp. 125, 210-16.

[7] The total of highway bonds authorized is $115,000,000. The policy is to issue no more.

Almost the entire state government debt has been accumulated since 1921, when the legislature voted the first large bond issue of $65,000,000, $50,000,000 of which was for roads and $15,000,000 for permanent improvements at the various state institutions. It is not likely that the state debt will get any larger, as the urgent needs have been taken care of, and wisdom would not lie in incurring further debt. The debt will gradually decline as the sinking fund accumulates and bonds are retired. The 1929 legislature was strongly opposed to further bond issues, finally allowing $2,000,000 for permanent improvements at the various institutions.

As has been pointed out, the bulk of our state debt has been incurred for the purpose of building a state system of highways. Further road construction will come out of the surplus current income from motor car licenses and the gasoline tax, after interest obligations, sinking funds, and maintenance have been provided for.

The bonded debt of the state, when all authorized issues have been sold, will be approximately $186,000,000. Highway bonds will aggregate $115,000,000, the balance comprising general fund bonds, including $17,000,000 lent to counties for building schoolhouses, which will be repaid. More than $25,000,000 has been invested in permanent improvements at the various state institutions. The rest of the debt has been incurred for refunding, for World War Veterans' loans, the Great Smoky Mountain National Park, and for other purposes.

The bonds that have been issued since 1920 have sold at five different rates of interest, ranging from 4 to 5 per cent. Undoubtedly the state has often sold bonds at too high interest rates, in order to get the money for rushing its construction program through. If all the bonds could have been sold at 4 per cent, about $20,000,000 could have been saved during the life of the issues.

The capital assets of the state government, including its stock and bond investments, investments in state highways, institutions, department buildings, real estate, and the like, were estimated to be $252,102,814 on June 30, 1928. The actual and potential liabilities of the state on that date were $174,543,336, leaving an actual net worth of $77,559,478. The state educational, charitable, and correctional institutions were valued at $44,359,116.

Whether or not states should incur such a heavy debt is a matter of opinion. North Carolina, after thorough deliberation, decided to build in a hurry by the bond route, and build she did. She has her roads and her buildings to show for her debt. No one regrets the policy the state decided to pursue. The people are unanimously of the opinion that it was good business to build on the basis of bond issues. It is generally assumed that the roads are entirely self-supporting, on the basis of savings on wear and tear on motor cars, and time saved in traveling over excellent highways, not to mention the added comfort and pleasure involved.

The National Industrial Conference Board, in discussing the bonded debt of state governments, makes the following pertinent remarks:

> Relative indebtedness is not in itself an adequate test of public economy and efficiency. Rising public expenditures may be financed without borrowing by increased current revenues or by shifting financial obligations from the state upon local political units; or, the possible benefits to be derived from such expenditures may be foregone. Some of the more heavily debt-burdened states have assumed financial obligations customarily left to local governments. Notable among these is North Carolina. A small group of states have worked out a system of state and local coöperative effort and responsibility in civic development, such as state guarantee of local indebtedness and supervision of certain local revenues and expenditures. Again North Carolina is a good example. On the other hand, a considerable number of "conservative" states avoid initiative or responsibility in all matters of internal improvement which can be left to the disposition of the municipalities and counties.[8]

Thus the trend of events in North Carolina is for the state to take over functions heretofore supported locally, where it is evident that they can in that way be more economically administered. For instance, the state can sell bonds at better rates than can the counties, so it markets bonds and lends the money to the counties for the purpose of erecting schoolhouses. The state can construct and maintain highways more economically than can the counties, so the state is gradually adding more mileage to its highway system. Gradually the public school system is coming to be state-administered and state-financed. All conservation and development work is now carried on by the state. In the fields of public health and public welfare the state is increasingly important. The increased state bonded debt and the increased state government expenditure are largely offset by lessened necessity for local debt and for raising local current revenue. From the standpoint of efficiency the trend is a wise one.

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[8] *News Letter,* vol. XV, no. 1.

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The Library files, Department of Rural Social-Economics, contain a vast accumulation of data and materials on all phases of state government, especially for North Carolina.

CHAPTER XIV

COUNTY GOVERNMENT IN NORTH CAROLINA[1]

North Carolina, like all the other states, is divided for administrative purposes into counties. The number now stands at an even hundred. The counties vary in area from 165 to 990 square miles, in population from less than 5,000 to over 100,000, and in taxable wealth from $2,337,838 to $204,837,470. The average county has an area of 487 square miles, a population of about 30,000, and taxable wealth to the amount of about $30,000,000.

There have been no new counties established since 1911, and it is doubtful if any more will be formed. A network of good highways and the widespread use of automobiles have so reduced the barriers of distance that the need for a courthouse every few miles no longer exists. In fact there are more counties now than the need justifies. In 1920 there were fifty-four counties without a census-size town, and in 1928 twenty-six did not have as much as $10,000,000 of taxable wealth. The consolidation of certain contiguous counties would be in the interest of economy, but tradition and local pride will deter any movement in that direction.

Politically, a county has a dual nature. It is a "body politic" and a "body corporate." In the exercise of most of its functions it is simply an agency of the state set up for the convenience of local administration. It is created by the legislature to whose control it is subject. In most states the constitution imposes certain limitations upon the legislature, but in North Carolina counties may be created, changed, or abolished at the will of the legislature. A county is a body corporate, but it is not a true municipal corporation. It possesses only such corporate powers and delegated authority as the legislature may wish to confer, and such power and authority must be exercised in the way and for the purpose that the legislature enacts.[2] A county enjoys, however, a certain measure of local autonomy. It chooses its own officers and in many respects determines its own policies. It is a quasi-corporation. It has a corporate existence, but its powers are less than those of a full municipal corporation. It may exercise its corporate powers only in the furtherance of governmental functions. Unlike municipal corporations, counties are not ordinarily liable to be sued civilly for the manner in which they exercise, or fail to exercise, their corporate powers.[3]

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[1] This chapter is based very largely on P. Wager's *County Government in North Carolina.*

[2] Dare *v.* Currituck, 95 N. C. 158.

[3] White *v.* Commissioners, 90 N. C. 439.

As in many other states, the North Carolina county serves as a district for choosing representatives to the legislature. In the lower house eighty-four counties have one representative each, twelve have two each, and four three each. Single counties and combinations of counties make up the senatorial districts, each being entitled to one or two senators. There are 33 districts electing a total of 50 representatives to the upper house. The county has thus been recognized as a political community and has been made, as far as is practicable, a unit of representation.

Strong County Consciousness

The county in North Carolina and throughout the South as a whole is relatively more important than in those states where the township figures prominently in the scheme of local government. North Carolina has townships, but they have little political significance. They were introduced into the Carolinas during the Reconstruction régime, and for a few years a full township organization was maintained. But that scheme of government was a foreign institution and was never popular. Most of its features were overthrown within a few years. The unit itself has remained, but it is now nothing more than a magisterial district and a voting precinct. There is a diminishing need for a political unit smaller than the county, and states in which the township is still of some importance are considering its abolishment.

The absence of a township organization in the South increases the importance of the county. It has become the unit of administration in public education, public health, public welfare, highway construction and maintenance, poor relief, library service, and other fields of activity. There is a strong sense of county citizenship, and in many instances the county-seat town is the trade and culture center of the county. On first Mondays, when the commissioners meet, and on court days hundreds of people assemble at the county seat. Within recent years a large number of North Carolina counties have built new courthouses, most of them rather pretentious. One poor mountain county erected a courthouse largely of native marble, and several other rural counties have put up courthouses costing at least a quarter of a million dollars.

This strong sense of county pride and loyalty indicates that the North Carolina county is more than a mere administrative district. It is a political community, and every representative who goes to the General Assembly attempts to secure legislation for his particular county. Hundreds of these public-local bills, so-called, are enacted at each session of the legislature. The fact that legislation dealing with a single county does not interest the representatives from other counties makes it possible for much mischievous law to be enacted. Important changes are made in the personnel or structure of a county at the whim of the representative and often without the knowledge and support of its citizens. Even when supported by local sentiment, these public-local acts are often inimical to the progress of the state. Equally vicious has been the practice of getting one's county exempted from the provisions of general statutes. Local legislation figured so prominently in a recent session of the General Assembly that the Governor reprimanded the legislators for being "county-minded" rather than "state-minded."

However obstructive a provincial attitude may be to state progress, county consciousness is conducive to the development of a county and its institutions. The constant comparison of one county with another on every conceivable score introduces a wholesome kind of rivalry and stimulates the backward counties to overcome their deficiencies. The North Carolina county is often far more than a political unit; it is a social and economic unit of real vitality. This is not true of all the counties of the state, but it is true of part of them, particularly those in which the county-seat town is the trade center for the whole county.

The constitution makes provision for the election of the following county officers—sheriff, clerk of superior court, coroner, treasurer, register of deeds, surveyor, and board of commissioners.[4] But the amendment of 1875 authorized the General Assembly "to modify, change, or abrogate" the sections in which some of these officers are mentioned.[5] Only the court officers—sheriff, clerk of superior court, coroner, and justices of the peace—may therefore be considered constitutional officers. The constitution provides that in each county a sheriff and coroner shall be elected by the qualified voters for a term of two years and a clerk of superior court for a term of four years. In the case of justices of the peace, the constitution indicates their jurisdiction but leaves the manner of selection to the General Assembly. The treasurer, register of deeds, surveyor, and commissioners are statutory officers, and the offices may be abolished at the will of the legislature. The duties of even the constitutional officers are fixed by statute.

In addition to the officers mentioned above, there are other officials or boards created by statute for all counties or for particular counties. Every county has an appointed county board of education with three or five members, which in turn chooses a county superintendent of schools. Each county has a board of health consisting of the chairman of the board of county commissioners, the superintendent of schools, the mayor of the county-seat town, and two practising physicians. There is in each county a board of public welfare of three members appointed by the state board of public welfare. In about half of the counties there is a superintendent of public welfare chosen by the board of county commissioners and the county board of education in joint session. Several counties have an inferior court, called either a recorder's court or a general county court, with an elective judge and a prosecuting attorney. Since 1927 it has been mandatory for every county to have a county accountant,[6] but in some instances the duties of this office have been given to the register of deeds or to a member of the board. Five counties have county managers. For a few months each year it is necessary to appoint a tax supervisor, together with list-takers and assessors, and in some counties the tax supervisor is employed the full year. Quite often one person serves both as tax supervisor and county accountant. Most counties have certain highway officials such as road supervisors and engineers, and most counties have or have had separate highway boards. All counties have a county physician, and thirty-nine counties have a health unit consisting of a full-time health officer assisted in most instances by one or more field nurses.[7] In addition to these more important officials there are numerous deputies, superintendents of county institutions, and clerks, the number of such subordinates depending on the size of the county.

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[4] North Carolina Constitution, Art. 7, Sec. 1, and Art. 4, Secs. 16, 24.

[5] *Ibid.*, Art. 7, Sec. 14.

The Board of County Commissioners

The governing body of the county is the board of commissioners, which represents the county in its corporate capacity and corresponds to the board of directors of a business corporation. In general, county boards in the United States are of two kinds, large boards composed of representatives from the townships and small boards elected from the county at large or from districts into which the county has been divided. North Carolina has the small board, which is generally conceded to be the preferable type. There are usually three or five members, and in most counties they are chosen at large.

The county board is sometimes referred to as the legislative branch of county government, but actually it has very little legislative power. It has no police power; it has no ordinance-making power; it has no more than a degree of discretion in the exercise of those powers which are conferred upon the county by the state. It is like a legislative body in that it has the power to levy taxes, but unlike a legislative body in that it expends its own appropriations.[8] The county is little more than an agency of the state, and the work of the commissioners is mainly that of administering those functions which the state imposes upon the county. The board is an administrative body rather than a legislative body.

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[6] Public Laws of 1927, chap. 146.

[7] Public Health Reports, vol. 44, no. 20.

Ordinarily the term of a commissioner is two years, though a few counties are operating under special acts which provide for longer terms and rotation. A vacancy on the board of commissioners is filled by the clerk of superior court. There is no standard scale of compensation, but most counties pay mileage and from three to five dollars per diem. A few counties pay each member of the board a nominal salary, and several pay the chairman a full salary. The board meets regularly on the first Monday of each month, and there are usually several special or adjourned meetings in the course of a year.

The constitution declares that "it shall be the duty of the commissioners to exercise a general supervision and control of the penal and charitable institutions, schools, roads, bridges, levying of taxes and finances of the county, as may be prescribed by law."[9] There has been a tendency, however, to delegate some of their duties and responsibilities to special boards. Hence each county now has a board of education, a board of elections, and a board of health, and many counties have a separate highway board. The board of commissioners has thus come to be primarily a fiscal board with a residuum of administrative duties.

The fiscal powers of the board include the preparation of the annual budget, determination of the tax rate, appropriation of county funds, selection of a county depository, and the power to make contracts, audit claims, and incur indebtedness. These powers are subject, however, to many limitations, constitutional or statutory. The state not only names a large number of functions which the county must support by taxation, but limits the tax which a county may levy to pay for these services. For instance, the county is required to provide and maintain a courthouse and a set of officers, hold court, maintain a jail, assess and list taxable property, take care of dependents, and perform many other services, all within a levy of fifteen cents on a hundred dollars valuation.[10] Additional levies are permitted or required for such special purposes as schools, roads, and debt service. All counties have at least these four major funds. The average countywide tax rate in 1928 was $1.25 per one hundred dollars valuation, and, on the average, 64.5 cents of this rate was for the support of the six months' school term.[11]

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[8] Wager, *op. cit.*, p. 56.

[9] North Carolina Constitution, Art. 7, Sec. 2.

[10] *Ibid.*, Art. 5, Sec. 6.

[11] Report of State Tax Commission, pp. 632-33.

For purposes other than to meet necessary expenses a tax cannot be levied, either within or in excess of the constitutional limitation, except by a vote of the people under special legislative authority. It is left to the court to determine what are necessary expenses, but the court cannot control the discretion of the commissioners in incurring a debt when the debt is necessary.[12] Whenever any project is contemplated which requires a large outlay of money, even for a necessary expense, the legislature usually requires that the issue be submitted to the people.

The constitution of the state sets up no debt limitation for counties. There are, however, statutory limitations of state-wide application unless and until a public-local act exempts a particular county from the limitation. Such public-local legislation is so common that the general limitation is of little significance.

More will be said about the fiscal duties of the board of commissioners in a later paragraph.

Another important responsibility of the board is that of getting the taxables on the tax roll. Real property is assessed quadrennially, and every fourth year the commissioners are required to set up machinery for that work. A county tax supervisor is appointed, and he, usually with the advice and consent of the commissioners, appoints one or more assessors in each township. The county supervisor has general oversight of the work. In the years when there is no reassessment of real property the township assistants are known as list-takers. In off years it is not necessary to visit the property, so the list-takers meet the taxpayers at convenient points in the township and help them list their personal property. Unless there has been some extraordinary circumstance, such as the erection or destruction of a building, real property is carried forward as it was assessed in the quadrennial year.

In assessment years the commissioners meet after the assessors have completed their work to review and equalize the valuations. Legally they have no right to change valuations except when they sit as a board of equalization.

Since the commissioners act for the county in its corporate capacity, they have control over all county property. It is their duty to erect and keep in repair the necessary county buildings, to purchase equipment for the various offices and departments, to let contracts, employ labor, and transact business in the name of the county. Unless the authority is delegated to another body the commissioners are responsible for the construction and maintenance of the public roads. They are required to provide by taxation for the relief of the poor.

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[12] Vaughn *v.* Commissioners, 117 N. C. 429.

Usually a county home for the poor is provided over which the commissioners exercise control. Outside relief is also granted. The commissioners may also make appropriations for hospitals, libraries, armories, public health service, agricultural development, and a variety of other purposes.

Although the board of commissioners has numerous and important powers, it lacks certain powers necessary to make its will effective. Since the board is the representative and guardian of the county this is a serious lack. Except in a limited way the board cannot regulate or control the activities of the other elective officers. It may demand reports from them, but it cannot compel them to comply. Even though there may be coöperation through courtesy, there is no real coördination. Each office is a separate entity and occupies the same status politically as the board itself. The commissioners are only nominally the head of the county. Only over their own appointees can they exert real control. With numerous elective officers, and fortunately they are not as numerous in North Carolina as in some states, it is impossible to fix responsibility.

An even greater weakness in county government has been the lack of an executive agent to act for the board when it is not in session. To overcome this deficiency a few counties have provided for the appointment of a county manager. Up to date (May, 1929) seven counties have named managers, but in Iredell and Harnett the managerial plan was discontinued after a brief trial. Apparently the men named were not qualified for the work. In Davidson and Robeson counties managers are employed. In Guilford, Cleveland, and Alamance counties managerial powers have been conferred upon a member of the board. A great deal has been written in favor of the adoption of the manager plan in county government, which offers real possibilities. North Carolina's experience has hardly been a fair test, for the reason that in making the appointments politics has been the dominant consideration. Furthermore, the commissioners have been reluctant to surrender any of their traditional powers, and the managers have not had the opportunity to exercise a full measure of control over administration.

In many counties the county auditor, or county accountant as he is now called, has been granted a considerable degree of administrative authority and has become a very useful public servant. In some cases he approaches the stature of a county manager. A fuller statement of his duties will be made presently.

Other County Officers

Register of Deeds. There is in each county a register of deeds elected by popular vote for a two-year term. His principal duty is to record all instruments delivered to him for registration after they have been probated by the clerk of the superior court. Such instruments include deeds, mortgages, deeds of trust, liens, and other business contracts. In most counties the register of deeds acts as clerk to the board of county commissioners. In this capacity he rarely does more than perform such routine duties as writing up the minutes of the board meetings, issuing vouchers, and preparing certain reports. His clerical duties at one time included the preparation of the tax roll, and that work is still done by the register of deeds in several counties. There is a tendency, however, to delegate this work to the tax supervisor or the county accountant. Finally, his duties include that of issuing marriage licenses.

Clerk of Superior Court. Unlike the other county officers, the clerk of superior court is elected for a term of four years. In case of a vacancy the office is filled by the judge of the superior court. The duties of the clerk may be divided into three classes: first, those which he performs as an officer of the superior court; second, those which he performs as an independent judge; and third, various clerical duties which are in no way connected with the court.[13]

As the secretarial officer of the superior court he must be in regular attendance to issue writs, swear witnesses and jurors, assemble and assume custody of all papers connected with each case, keep a record of the court proceedings, and make out the bills of cost. Between terms of court he represents the court, which gives him jurisdiction to hear and decide all questions of practice and procedure, to enforce the orders of the court, and to render certain kinds of judgment. Practically all cases tried in the superior court are begun and ended by the clerk, who issues the original summons and the final execution.

In this state the clerk of superior court is also judge of probate, in which capacity he is not a part of the superior court but an independent tribunal of original jurisdiction, and is called upon to approve or acknowledge all instruments for registry in the office of the register of deeds. He also has many duties in connection with the settlement of estates, such as to grant or revoke letters testamentary and of administration, to appoint and remove guardians, to audit the inventories, accounts, and final settlements of administrators, executors, guardians, and commissioners, and occasionally to act as trustee of an estate himself. He is responsible for the investment and safekeeping of fiduciary funds left in his hands. The clerk is also judge of special proceedings, that is, cases brought into court for settlement which do not involve a suit. Proceedings for dower, partition, and widow's allowance are examples of this kind of case. Finally, the clerk is judge of the juvenile court.

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[13] See Wager, *County Government*, pp. 247-53.

Of his miscellaneous duties only a few need be mentioned. He issues commissions to justices of the peace and notaries public; issues hunters' licenses; commits criminals to the road camps or to the penitentiary; assists in the examination of persons alleged to be insane; serves on the county board of pensions; and keeps a great variety of records. The clerk is usually a man of more than ordinary ability, and there has been a tendency for the state to impose more and more duties upon him.

If there is an inferior court in the county the clerk of superior court is often made the clerk of the lower court also.

Formerly it was the custom for the register of deeds and the clerk of the court to be compensated with the fees of their offices, and a number of counties still adhere to this practice. Most counties, however, now pay salaries to the incumbents of these offices.

County Treasurer. Until recent years every county has had an elective county treasurer. In 1913 an act was passed by the General Assembly authorizing the board of commissioners in twenty or more counties to abolish, in their discretion, the office of county treasurer and appoint in lieu thereof one or more solvent banks or trust companies.[14] Since that date many other counties have secured special acts permitting them to take the same step. Now there are more than forty counties in which banks act as financial agents. Since the counties are now all required to have a competent county accountant there is still less need for a treasurer. In 1927 the legislature authorized the county commissioners to designate some bank or banks as the official depository of the county funds even where there is a treasurer.[15] To pay a treasurer a salary to serve as custodian of county funds when banks are willing to pay for the privilege is an unnecessary waste of money. Of course adequate bond should be required in either case.

The Sheriff. The sheriff has always been a very important officer in North Carolina, usually enjoying more prestige than others. Not infrequently the position is gained and held because of political influence. The sheriff has been popularly elected since 1829, or longer than any other county officer. He is practically independent of the county commissioners but may be removed for cause by the judge of the superior court. He is quite as much a state officer as a county officer.

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[14] Public Laws of 1913, chap. 142, and of the Extra Session, 1913, chap. 35.

[15] Public Laws of 1927, chap. 146, sec. 19.

The sheriff in this state has four types of duties.[16] He is the ministerial officer of the court, and as such summons jurors and witnesses, serves warrants, opens and closes court, delivers prisoners to and from the courtroom, and performs various other services. If there is an inferior court in the county he and his deputies perform similar functions for it.

Secondly, the sheriff is the principal peace officer of the county, and the maintenance of law and order is in his hands. He may make an arrest with or without a warrant, and in making an arrest may use as much force as is necessary. In order to apprehend and capture felons he may summon the posse comitatus, or power of the county, to his aid. In times of riot or serious disorder he may call on the governor of the state for militia. The sheriff is not always an efficient police officer, both because he lacks the training to combat professional crime, and because he is too prone to measure political effect to be aggressive in law enforcement when local people are involved.

In the third place, the sheriff has the care and custody of the jail and either appoints the jailer or serves himself. It is his responsibility to see that persons confined are secure from danger and reasonably comfortable. If a prisoner escapes, the burden of proof rests upon the officer to show that the escape was not due to consent or negligence.

Finally, the North Carolina sheriff has, from colonial times, served as tax collector for the county. The combination of duties has been considered an economy, but it is an incongruous arrangement and has been detrimental to the efficient performance of either duty. The two kinds of work call for different qualifications. Tax collecting demands some facility as a bookkeeper, and good police officers are often poor bookkeepers. Furthermore, the commissions paid for collecting taxes have been so generous as to make the sheriff's office sought and dispensed as a political plum. In recent years there has been a tendency to reduce the compensation of sheriffs, and in a few instances the tax collecting work has been taken from them. There has also been a strengthening of the law in respect to tax settlements, but even yet there is some looseness. Tax collecting has been one of the most unsatisfactory features of North Carolina county government, and having it an adjunct of the sheriff's office has been mainly responsible.

Coroner. Like most other states North Carolina still elects a coroner in each county, though the office could be dispensed with. The main function of the coroner is to investigate deaths which have occurred under unusual or mysterious circumstances, and if it appears that there has been foul play to conduct an inquest. This function could very well be performed by the county physician or the county health officer, or even better, attached to the solicitor's office. The only other duty of the coroner is to serve as sheriff when there is no sheriff or when the sheriff is disqualified by reason of the fact that he is a party to a proceeding in the court. If the office were abolished the court could appoint a sheriff to act in such emergencies.

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[16] See Wager, *County Government*, pp. 266-72.

Surveyor. The last of the so-called constitutional officers is the county surveyor. Originally such an officer was chosen to survey lands that were transferred from the public domain to private ownership. Occasionally he was called upon to determine the boundaries of lands involved in a suit in court. Rarely is the county surveyor called into use in connection with highway surveys. The office is a relic of the past and should be abolished. As a matter of fact there is often no candidate for the office.

Statutory Officers. Several county offices have developed in recent years which are more important than some of the constitutional offices. Some of these are discussed in other chapters specifically treating the activities connected with these offices, and it will not be necessary to go into them minutely here. For instance, the school organization and officers are discussed in the chapter on education; the health organization in another; the board of public welfare and the superintendent of public welfare receive attention in their proper places; and so on.

The only other important officer in the county is the county accountant, or auditor, who in a few cases has grown to the stature of a manager. But his duties will be discussed in connection with the treatment of fiscal administration which follows.

Fiscal Administration

The efficiency of any business organization is dependent in a large measure upon unity in fiscal control, yet the business of the county, though grown to large proportions, has lacked this essential element. School boards and road boards have been spending huge sums of money without detailed accounting to the board of commissioners. Frequently they have spent far in excess of their appropriations, with the result that the commissioners have had to issue bonds to cover the deficits. On the other hand, serious deficits have developed in the accounts over which the commissioners had immediate control. On June 30, 1928, the counties of the state had $128,000,000 of bonded indebtedness, and of this more than $15,000,000[17] represented funding operations. If all the issues which were designated as road and bridge bonds but which really represented a funding of deficits could be included the picture would be even darker. The tax levy has not kept up with current expenditures; it has been easier to issue bonds. In 1928, 21.5 per cent of the county taxes collected went for debt service, and if the local district collections were included the percentage for debt purposes would be even greater. Townships and special districts have a bonded debt of over $44,000,000.[18]

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[17] Report of the State Tax Commission, p. 699.

Not only has the indebtedness of the counties become so large that careful bookkeeping is imperative, but the volume of current expenditures demands unified and rigid fiscal control. County and district taxes, including school taxes, amounted to over $45,000,000[19] in 1927. Including the expenditure of borrowed money, the counties are spending about $60,000,000 a year, or an average of $600,000 a county. Surely these huge expenditures warrant careful financing.

The General Assembly of 1927 enacted legislation designed to improve and safeguard the accounting systems and financial practices of the counties. The County Fiscal Control Act[20] may be summarized as follows:

The commissioners of each county are required to appoint "some person of honesty and ability," who is experienced in modern methods of accounting, as county accountant. The duties of the accountant are to keep the financial records of the county, examine the accounts of each courthouse officer regularly, prepare the financial statements, and assist in the preparation of the budget. The act requires that every county operate on a budget basis, and that no contract or agreement requiring the payment of money, or requisition for supplies or materials, is valid unless endorsed by the county accountant as follows: "Provision for the payment of the moneys to fall due under this agreement has been made by appropriation or by bonds or notes duly authorized." All claims must be presented to and approved by the county accountant, or by the board after his disapprobation by entering on its minutes the reason therefor.

It is necessary to state that not all the counties are carrying out the full letter of the law, but most of them have made a fair effort to do so, and already the benefits are apparent. Many counties closed the first fiscal year under its operation with a surplus. Some counties did not appoint accountants with the required qualifications, but there is a tendency to replace them with well-trained men.

A companion act, known as the County Finance Act[21] was designed to safeguard county credit by restricting the extent to which and the purposes for which debts may be incurred. A county is permitted to borrow for ordinary expenses in anticipation of taxes and other unrealized revenue of the current year up to 80 per cent of the amount of such uncollected revenue, provided such loan is repaid not later than thirty days after the close of the fiscal year. A county may borrow in anticipation of the receipt of the proceeds of a bond issue up to the amount of the issue, provided such loans are made payable within three years. Counties may issue bonds for any one of the purposes mentioned in the law, provided they are serial bonds, the first installment of which is payable within three years after the date of issue, and provided they are entirely retired during the probable lifetime of the improvement for which they were issued. For instance, bonds for concrete highways may run 20 years, for macadam roads 10 years, for sand-clay roads 5 years. Funding bonds must mature within 15 years and refunding bonds within 20 years.

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[18] Report of the State Tax Commission, p. 695.

[19] *Ibid.*, p. 448.

[20] Public Laws of 1927, chap. 146.

[21] *Ibid.*, chap. 81.

Another provision of the Finance Act requires that all bonds issued under the provisions of the Act shall be submitted to a vote of the people if as many as 15 per cent of the qualified voters request it. The Act also sets up debt limitations. For school purposes the indebtedness must not exceed 5 per cent of the property valuation unless it was in excess of 4 per cent at the time the Act was ratified, in which case the limit becomes 7 per cent. In case a county assumes all local school indebtedness the maximum becomes 8 per cent. For other than school purposes the limits are also set in 5 and 7 per cent. These limitations do not apply to funding or refunding bonds.

In 1927 new legislation was also enacted in the interest of better tax collecting.[22] The sheriff, or tax collector, is required to turn over his collections daily, to advertise delinquent landowners the first of May, and to conduct the tax sale the first Monday in June, and to make final settlement before the end of the fiscal year, that is, by June 30. The method of redeeming land was also changed, and unredeemed tax sale certificates are now to be foreclosed exactly as a mortgage. As indicated in a previous paragraph, tax collecting has been unsatisfactory in the past, and it is not to be expected that the new high level of efficiency can be attained at once.

One of the unique features of the new legislation was the creation of a county government advisory commission as a permanent detail of the civil establishment at the state capital. The executive secretary of the commission and his assistant visit any county upon invitation to advise and assist the officials in the performance of their duties. They have been particularly helpful in assisting the county accountants to set up the new budgetary accounting system. Real headway has been made toward the perfection and adoption of a uniform accounting system. The last legislature strengthened the law slightly and among other things gave the advisory commission the authority to pass upon auditing firms that were soliciting county work. Only those approved by the commission may be employed. The commission may also determine what the audit shall cover. Unless most of the counties have employed capable county accountants by 1931 perhaps the advisory commission should be given authority to pass on the qualifications of candidates for this office. To give a state agency advisory rather than regulatory powers is an interesting and meritorious experiment, but there will probably be some counties that will not respond except under compulsion.

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[22] *Ibid.*, chap. 221.

In concluding this brief treatment of county government a few observations and recommendations may be pertinent. North Carolina is predominantly a rural state. Most of the benefits of government which the people enjoy are supplied by the county; most of the taxes which they pay are expended by the county. The county assesses property, collects taxes and deposits them, supervises schools, protects health and property, promotes public welfare and economic development, handles estates of the deceased, and promotes roads. Moreover, the county seat is often the trading center of the county; the lawyers and doctors are located there; it contains the banks and lodge rooms, and the movie theatre, and perhaps a library and a hospital. Thus the county occupies a prominent place in the minds and affections of the country people and is therefore the proper unit of administration for governmental functions and for many private activities as well. For these reasons it is particularly important that the county and its machinery be fully utilized in a program of state development. This, in turn, demands that the quality of administration be vastly improved.

RECOMMENDATIONS

Some of the most obvious improvements needed in county government and administration may be suggested:

1. A few of the small weak counties should be consolidated with adjoining counties. Before or immediately after consolidation the added territory should be tied to the new county seat by a trunk line highway.
2. The highways of a county should be classified according to volume of traffic and maintenance expenditures graduated according to class. The continual extension of highway mileage in the sparsely settled counties should be checked.

3. There is need for improvement in the machinery of assessing and listing taxable property in order that property may be got on the books with more completeness and equality.

4. The penalties for delinquency in listing taxables and in paying taxes should be imposed with more consistency.

5. Only those who are eminently qualified should be appointed as county accountants, and every county should rigidly adhere to the provisions of the finance and fiscal control acts.

6. Most counties are already so saddled with debt that further bond issues should be endorsed only in cases of extreme necessity.

7. Wherever possible, adjoining counties should coöperate in reducing expenses by a joint use of hospitals, homes for the indigent, and other similar institutions.

8. The number of justices of the peace should be reduced and higher qualifications and better service demanded of those who remain. Courts of lower jurisdiction than the superior court should be established wherever it is in the interest of economy to do so.

9. The care of county property should be delegated to some one official whose duty it would be to make periodic inventories and recommendations. Centralized purchasing should be the accepted practice.

10. The board of commissioners should delegate many of the details of administration to a county manager, or certain managerial powers should be delegated to the chairman of the board or the county accountant.

11. Financial statements, accompanied by brief intelligible interpretations, should be published periodically. Occasionally the statements should be published in booklet form.

12. There ought to be in each county a citizens' organization informing itself about county affairs, giving support and counsel to the board of commissioners, and promoting a good administration and a balanced development of the county.

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During the period from 1924 to 1929, 7 research assistants in the Institute for Research in Social Science, under the direction of Dr. E. C. Branson, have completed field studies of county government in 60 North Carolina counties, along with a few counties in other southern states. These studies were made by Messrs. Wager, Trussell, Terry, Green, Edwards, Andrews, and Bradley. Manuscript copies are on file in the Library of the Department of Rural Social-Economics and in the Institute for Research in Social Science, University of North Carolina, Chapel Hill.

CHAPTER XV

PUBLIC EDUCATION

During the greater part of the history of North Carolina the state has held a very low position in the field of public education. There have been two shining exceptions, namely, the period from about 1840 to 1860, and the last few years. The main concern here will be to outline in a brief way the educational progress within recent years and our present status. However, it seems in order to give just enough out of the distant past to serve as a brief historic background. The following excerpts are interesting:

> Those of us who have lived to see the first monument ever erected to a North Carolina statesman entirely by popular subscription erected to the founder of the state's leading college for women, and who have lived through the administration of a great Chief Magistrate of the Commonwealth whose highest claim to a permanent place in history is his service as "The Educational Governor" can scarcely realize the utter indifference to education that prevailed among the people of North Carolina from 1790 to 1840. . . . I know of no subject in North Carolina history that will better repay careful study than the fifty years of agitation that preceded the establishment in 1840 of our ante-bellum common school system.
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> In 1786 a traveler of uncommon intelligence, after making a route from Edenton to Charlotte, entered in his journal the assertion that no state in the Union at that period had done so little to promote the cause of education, science and the arts as North Carolina, and he observed that the great mass of the people were in a state of great mental degradation. These statements are borne out by Archibald D. Murphey, who tells us that in 1794 there were but three schools in the state in which the rudiments of a classical education could be acquired . . . and that it was impossible to realize the difficulties under which the student of that day labored in his search for an education. (This statement was made in 1827, by which time conditions had improved but little.)[1]

In 1816 "Archibald D. Murphey declared that the elementary education of children in North Carolina was left in a large measure to chance, and that thousands were accordingly growing up in total ignorance of their religious and moral duties."[2]

In 1817 John M. Walker, a member of the General Assembly, declared: "It is a melancholy fact that our schools are lessening in their number and usefulness."[3]

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[1] Connor, *Ante-Bellum Builders of North Carolina.*

[2] *Ibid.*, p. 10.

"In 1829 Joseph Caldwell, president of the University, declared that North Carolina was three centuries behind the other states in the education of her children, and that a great many people actually boasted of their ignorance of letters."[4]

One more quotation will suffice. "After hearing these statements of men in positions to know the facts you will not be surprised to learn that a careful estimate, made in 1838, placed the number of illiterate children in the state between five and fifteen years of age, at 120,000; and that the United States Census of 1840 revealed to the world the humiliating fact that, after more than sixty years of independence, one-third of the adult white population of North Carolina could neither read nor write."[5]

The blame for the low status of education in the state before 1840 can be laid entirely at the doors of the legislature. The governors of the state had been exceptionally able men, and all of them had tried to coerce the legislature into providing for public schools. "In 1835, Governor Swain, in his last message, took a parting shot at the Legislature by declaring that the history of that body for fifty years would exhibit to posterity little more than the annual imposition of taxes, one-half of which was spent on the Legislature itself, and the other half on the train of officers who superintended the machinery of government. The establishment of schools for the convenient instruction of youth, and the development and improvement of our resources will seem scarcely to have been regarded as proper objects of legislative concern."[6]

There was living in the state at that time a man who rightfully should be labeled the "Father of Education" in North Carolina, Archibald D. Murphey, who suffered the misfortune of being born a hundred years too early. Murphey was the state's first great advocate of public education. His famous plan for a system of public schools was submitted to the legislature in 1817 but seems to have been received with utter indifference. The plan he outlined is, generally speaking, the scheme followed in the state today.[7]

The first substantial victory for public education was won in 1825, when what is now known as the Literary Fund was established. The income from this fund was to be used for the support of schools. It was greatly increased in 1836 when the surplus revenue of the federal government was distributed to the several states; and of her share North Carolina devoted $1,133,757.39 to the Literary Fund. This fund was sufficient to give a fair start to the first public school system, enacted by law in 1839, which gave legal sanction to much that had been advocated by Murphey in 1817. From 1840 to the outbreak of the Civil War, North Carolina enjoyed a brief period of leadership and progress not unlike that of the last decade or so. The Constitutional Convention of 1835 resulted in the enactment of changes that made progress possible. The western half of the state had won its fight with the landlords of the east. Conservatism was overthrown and a new day ushered in.

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[3] Connor, p. 10. [4] *Ibid.*, p. 11. [5] *Loc. cit.* [6] *Ibid.*, p. 15.

[7] *Ibid.*, p. 55, summarizes his program.

> The influence of these changes on the political, industrial and educational life of the state cannot be easily overestimated. They ushered in an era of progress that within the next quarter-century raised North Carolina from the lowest to the highest among the slaveholding states of the South in all those things that make for the material, intellectual, and social uplift of the people. To this era belong . . . the founding of the State School for the Deaf and Dumb and the Blind, the establishment of a system of public schools, the expansion of the University from a local high school with ninety students into a real college whose five hundred students represented every state from the Potomac to the Gulf of Mexico, and many other progressive measures that lie at the very foundation of the present prosperity, honor and glory of the state.[8]

In 1860 Calvin H. Wiley wrote: "The educational system of North Carolina is now attracting the favorable attention of the states south, west, and north of us. . . . All modern statistical publications give us a rank far in advance of the position which we occupied in such works a few years ago . . ."[9]

In 1840, largely as a result of the stimulation afforded by the Literary Fund (which amounted to about $2,000,000), there were in North Carolina four colleges with 283 students, 141 academies having 4,398 students, and 632 primary (public) schools with 14,000 pupils. In 1860 there were six colleges with 2,400 students, 350 academies with 15,000 students, and 4,000 public schools with an enrollment of 160,000 pupils.[10]

The above points are cited chiefly because it is not generally known that North Carolina had really struck a great stride during the period just preceding the Civil War, especially in the fields of education and of internal improvements. The War seems to have come at a particularly unfortunate time for North Carolina. Its effect on the state generally is too well known to need repeating, while it virtually destroyed the educational system, forcing the University to close its doors for a period of ten years. This was the Dark Age for North Carolina. The legislature of 1869 reënacted practically the same school law that was enacted in 1839. Progress from 1869 to 1900 was very slow. The low estate to which public education had been reduced may be judged from the fact that the total expenditure on public schools for the year 1899-1900 was only $1,062,304, or less than two dollars per child of school age in the state! The expenditure had increased from $650,000 as of 1885. The value of all public school property in the state in 1900 was only $1,000,000, or just 1 per cent of the present value (1929). Not more than 2,000 pupils were enrolled in the 30 high schools then in existence in the state.

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[8] *Ibid.*, pp. 32-33.

[9] *Report of the Superintendent of Common Schools for the Year 1859.*

[10] *State School Facts,* vol. V, no. 4.

From 1900 to the present, sufficient statistical information is available to show the progress of public education in this state. In general, this period may be broken into three parts: (1) 1900-1910, Aycock and revival; (2) 1910-1920, a period of conservative growth; (3) 1920 to the present, a period of very rapid development. Due to the fact that no other matter is of such vital concern as public education and that all North Carolinians are proud of the remarkable gains which have been made during the last three decades, the following[11] is submitted as an historic account of that progress.

Aycock and Revival. When Aycock was inaugurated governor of the state in January, 1901, he declared that it would be his aim to aid the cause of education during his four years in office. In part fulfillment of his promises to the people, he called a conference of the educational workers of the state, which he presided over himself, and as a result of which an educational campaign was organized and a committee appointed with the title of "The Central Campaign Committee for the Promotion of Public Education in North Carolina." The work of this committee was to make campaigns for local taxation, for the consolidation of school districts, for building and equipping better schoolhouses, for longer school terms, for larger salaries of teachers, and to collect and release to the newspapers articles relating to the improvement of the public schools. This committee also called on ministers of the state to preach a sermon at least once a year on public education.

The results of the campaign cannot be measured. Educational rallies were held in every part of the state, and public men of every calling worked in it. The press and the other agencies also lent their support to the movement, with the result that at the close of the campaign in 1904 more than 350 rallies had been held in addition to the regular township meetings conducted by the county superintendents. A growth in sentiment for public education was everywhere noticeable, and there was a marked increase in enrollment in the higher institutions of the state.

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[11] Based on materials compiled by the State Department of Public Instruction, especially *State School Facts*, vol. V, no. 4.

The legislative appropriation of $100,000 which was distributed to the counties was doubled. Aid was given to the establishment of rural libraries, and the old Literary Fund was reorganized and set aside as a permanent revolving fund to be used as a loan for building and improving schoolhouses.

In 1907 the legislature authorized the establishment of rural schools, and the first annual appropriation of $45,000 was made as an aid in their maintenance.

It was during this period that the Appalachian Normal School was established at Boone, and the East Carolina Teachers College at Greenville. Provisions were made also for teachers' institutes as a means of improving their training while in service. Largely as a result of the momentum given by the campaign put on by Aycock and his co-laborers at the beginning of the decade, progress was made in every phase of education.

From 1910 to 1920. This was a period of continued growth and improvement in all branches of education. Several pieces of legislation were then enacted, the most important of which were as follows:

The legislature of 1913 changed the method of distributing state aid by requiring the counties to show that they had provided funds for a four-month term before they might participate in the equalizing fund. The act was intended to lengthen the school term to as much as six months, and a state-wide property tax of five cents was levied for the purpose.

This same legislature passed an improved compulsory attendance act requiring all children between eight and twelve years of age to attend school at least four months each year, while still a third law of educational importance passed in 1913 was the act prohibiting children under twelve years of age from being employed in factories except as apprentices and only after having attended school for the four months required.

The same year witnessed the passage of the state-wide law based on the Guilford County Act for the promotion of the teaching of agriculture and domestic science in high schools. Counties were permitted to issue schoolhouse bonds upon approval by a vote of the people.

In 1917 legislation was enacted looking toward the improvement of the training of the teaching personnel. The act required that a state board of examiners be appointed, which should have entire control of issuing certificates to all persons employed in the public schools. The work of this board was transferred to the State Board of Education in 1921.

Probably the most far-reaching legislation enacted during the period was that passed by the General Assembly of 1917 providing for the submission to the people of a constitutional amendment extending the minimum school term to six months. This amendment passed and went into effect for the first time during the school year 1919-20.

From 1920 to the Present. There are two outstanding pieces of legislation credited to this period:

1. The provision of the four special building funds totaling

EDUCATIONAL PROGRESS FROM 1900 TO 1928

Items	1899-1900	1918-1919	1927-1928
Total School Expenditure	$1,062,304	$ 6,768,063	$ 35,655,440
Expenditure Current Expense	$1,004,903	$ 5,850,129	$ 26,580,686
Expenditure Capital Outlay	$ 57,400	$ 917,932	$ 7,036,694
Value School Property	$1,097,564	$16,294,859	$100,929,365
Average Value per Schoolhouse	$ 158.65	$ 1,977.77	$ 16,074
Number of Log Houses	1,190	124	28
Number White One-teacher Schools	5,047	2,712	1,075
Number of Teachers	8,320	15,037	23,932
White	5,753	11,685	17,973
Colored	2,567	3,352	5,959
Average Monthly Salary	$23.46	$56.83	$106.50
White	$24.79	$62.00	$117.20
Colored	$20.48	$37.18	$ 70.80
Average Term in Days	70.8	112.0	148.0
White	73.3	113.8	152.7
Colored	65.3	105.6	137.4
Average Number Days in School	...	73.0	112.8
White	...	76.6	120.1
Colored	...	63.5	95.1
Total School Population	657,949	832,839	995,122
White	439,431	567,415	682,710
Colored	218,518	265,424	312,412
Total School Enrollment	400,452	591,487	848,778
Total Average Daily Attendance	206,918	385,673	640,651
Per Cent of School Population Enrolled	60.9	71.0	85.3
Per Cent of Enrollment in Average Daily Attendance	51.7	65.2	75.5
Number Public High Schools	30	391	658
Enrollment in High Schools	2,000	23,665	89,749
Number State-aided Rural Libraries	...	4,686	2,238
Children Transported to Consolidated Schools	...	*7,936	136,980
Educational Appropriations:			
Public Schools, Maintenance	$100,000	$844,692	**$3,250,000
Normal Schools, Maintenance	$ 16,000	$113,950	$ 296,200
Higher Institutions, Maintenance	$ 65,000	$427,500	$1,955,000

* 1919-20. ** $6,500,000 annually for 1929-31.

$17,500,000 which have enabled counties to borrow money from the state at a low rate of interest to erect school buildings. As a result, many modern and well-equipped schoolhouses have been built throughout the state.

2. The increasing of the State Equalizing Fund. By increasing its aid to the public schools through this fund, the state has definitely assumed a part of the responsibility of supporting these institutions. The General Assembly of 1927 broke all precedents by making an annual appropriation of $3,250,000 for distribution during 1927-28 and 1928-29. The 1929 General Assembly doubled the equalization fund, making available for the biennium 1929-31, $6,500,000 annually. This same General Assembly passed a new general school law that is rather vague and lacks a great deal of meeting with the approval of the school people of the state. The rulings that have been passed down by the attorney-general have been most liberal, however, and the 1929 law may finally be accepted as a step forward.

The table[12] on page 252 is a partial record of educational progress made by North Carolina since 1900.

For the biennium 1929-31 the legislature of 1929 appropriated a total of more than $21,000,000 for public education, an increase of more than $4,000,000 over the previous biennium. The biggest increase was in the equalization fund already mentioned. The following table shows the apportionment of the educational appropriation for the biennium 1929-31:

ITEM	APPROPRIATION
Permanent Improvements	$ 1,118,380
Department of Public Instruction	13,814,580
Educational Institutions	5,708,065
Federal Aid Coöperative Extension (State College)	558,976
Total Legislative Appropriation	$21,200,001
Federal Aid to Vocational Education	469,949
Total	$21,669,950

The legislative appropriation comes out of the general fund, none of it representing a levy on property.

Rank in Public Education. It is always a matter of great concern as to how a particular state ranks in public education. All available data show that North Carolina has made a great deal of progress in public education, but that her rank is still too low to justify resting on her laurels. Tables[13] published by the National Industrial Conference Board give North Carolina the following places for the years indicated:

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[12] Compiled from official sources, mainly from reports issued from the office of the State Superintendent of Public Instruction, Raleigh, N. C.

EDUCATIONAL RANK OF NORTH CAROLINA, AYERS' INDEX

YEAR	1890	1900	1910	1918	1922	1924	1925	1926
RANK	44	48	47	44	41	40	39	39

Data compiled by Frank M. Phillips[14] give North Carolina the following rank for the years indicated:

YEAR	1910	1918	1922	1924
RANK	45	43	41	42

It will be noted that the methods employed by two students give about the same results. Our per capita wealth considered, the present rank of the state, which is around thirty-eighth or thirty-ninth, is not discreditable. The fact that the state has improved her standing so rapidly is a matter of pride, only five states having improved their rank faster than North Carolina since 1910.[15] This is substantiated by studies of the National Industrial Conference Board which show that on the basis of income and wealth per child of school age, North Carolina's rank in abilty to support public education is forty-third.[16] Other studies show that the state spends a much larger per cent of annual income on education than does the average state. The most recent data indicate that 52.18 per cent of all tax money collected in North Carolina goes for the support of public education, and the ratio is higher in only four states.[17] This study also shows that while 2.68 per cent of the national income goes to support education, 3.57 per cent of North Carolina's income is so spent. Only ten states spend a larger per cent of their income on public education.

Consolidation and Transportation. North Carolina has made rapid progress in reducing the number of small schools. There was an increase of schoolhouses from year to year until 1917-18, when a decline began which has been much more rapid than was the increase prior to that time. It used to be the proud boast of the state that she built a schoolhouse every day. It is now the boast that each day sees a consolidation take place, for school officials claim that during recent years North Carolina has consolidated her rural schools faster than any other state. In 1926 there were only five states that had more consolidated rural schools than North Carolina, and much progress has taken place since that time. In 1900 there were 5,491 white one-teacher schools in the state. In 1928 there were only 1,075 left.

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[13] *Cost of State Government in the United States,* 1925-26, Table 62; 1926-27, Table 12. Computed from data compiled by the U. S. Bureau of Education, *Statistics of State School Systems.*

[14] *Ibid.*

[15] *Ibid.,* Table 12, 1926-27 Report.

[16] *Ibid.,* Table 60, 1925-26 Report.

[17] *Research Bulletin of the National Education Association,* Jan., 1929, covering year 1926.

The following tables give at a glance the rate at which consolidation has proceeded within recent years.

NUMBER CONSOLIDATED SCHOOLS

YEAR	WHITE	NEGRO	TOTAL
1921-22	326	29	355
1922-23	458	33	491
1923-24	634	57	691
1924-25	703	93	796
1925-26	696	118	814
1926-27	819	121	940
1927-28	812	129	941

YEAR	FOUR-TEACHER	FIVE- & SIX-TEACHER	MORE THAN SIX-TEACHER	TOTAL
1921-22	127	78	150	355
1922-23	179	102	210	491
1923-24	162	180	349	691
1924-25	165	208	423	796
1925-26	157	203	454	814
1926-27	195	181	564	940
1927-28	177	179	585	941

It will be noted that the tendency at the present is toward a decrease in small consolidated schools and an increase in the large consolidated schools.

No one can travel widely and fail to note that North Carolina has an exceptionally large number of first-class rural school buildings. The fact is that we make a much better showing in school buildings and in transporting pupils to consolidated schools than we make in perhaps any other phase of education. Some even think that our school plant is ahead of our schools.

Data released by the United States Bureau of Education indicate that in 1925-26 only 10.8 per cent of all teachers in North Carolina, white and colored, taught in one-teacher schools. There were only seven states that made a better showing in this respect. In one state more than half of the rural teachers taught in one-room schools. For the entire United States one-fifth of the rural school teachers taught in one-room schools. At that time North Carolina had 2,510 one-room schools, of which approximately one-half were Negro schools. If only white schools were considered, North Carolina would stand at or near the top in this respect. This is further proof that the state has an excellent school plant, if she does not show up so well in other particulars.

According to the most recent data,[18] North Carolina ranks first in number of consolidated schools to which children are transported by motor bus, 1,038; first in number of motor busses engaged in transporting children, 3,258; first in miles of route covered daily, 78,523; and first in number of rural children transported to such schools daily, 136,980. Proof of the size of our consolidated school districts is given by the fact that the average school bus route is larger in North Carolina than in any other state. One-third of all rural white school children are transported to consolidated schools. In 17 counties from one-half to almost the entire white rural school population is transported to school. The high rank of North Carolina in this particular is due largely to her excellent system of highways, radiating from and connecting every county seat and important town in the state. Only one county in the state provides no motor transportation for rural school children.[19]

School Property. An excellent idea of the general progress the state has made in education may be had from a study of increase in value of school property. In 1900 the total value of all public school property in the state, town and country, was around $1,000,000. The value in 1928 was nearly $101,000,000, 90 per cent being used by the white race and 10 per cent by the colored race. As late as 1915 the total value of school property was only $10,000,000, and in 1920 it was only $24,000,000. Thus the eight-year period following 1920 has seen our school property increase from $24,000,000 to more than $100,000,000.[20] Exactly one-half of the total is rural school property, although the value per white rural child enrolled is slightly less than half the value per white urban child.

The average white schoolhouse in 1908 was valued at $810. In 1928 the average was $23,369. The latest available data[21] show that North Carolina ranks fortieth in the value of school property per child, white and colored, the amount being $101. If the states were ranked on the basis of property per white child North Carolina would rank much better, probably about thirtieth.

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[18] *Bus Transportation,* Feb., 1929.

[19] For further details on consolidation and transportation, see *State School Facts,* vol. V, no. 12, entire issue.

[20] For a full record of growth, see *State School Facts,* vol. V, no. 9, whole issue.

[21] U. S. Bureau of Education for year 1925-26. Reported in *State School Facts,* vol. V, no. 9.

The following table is a partial exhibit of the growth in value of school property:

Year	Total Value	White	Colored	Value Per Schoolhouse	
				White	Colored
1908	$ 4,917,312	$ 4,282,255	$ 635,057	$ 810	$ 248
1915	10,434,117	9,270,583	1,163,533	1,644	483
1920	24,057,838	21,670,514	2,387,324	3,903	978
1924	59,758,005	53,177,235	6,580,770	13,627	2,991
1928	100,929,365	90,772,114	10,157,251	23,369	4,215

High Schools. There are no recent data by which one can compare the rank of states in any matters pertaining to high schools. It required many years to develop our school system to the point where it would begin to turn out a large number of graduates annually. It is certain that on the basis of percentage of total enrollment in high school and in percentage of total enrollment graduating from high school, North Carolina still ranks low in spite of recent enormous

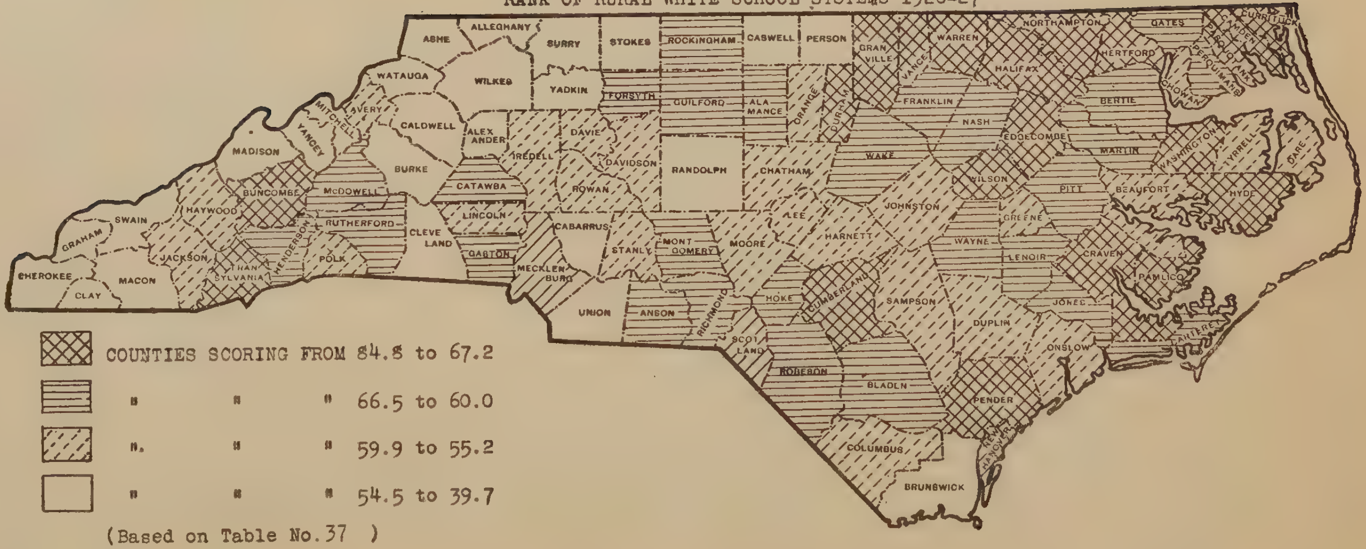
GRADUATES OF WHITE PUBLIC HIGH SCHOOLS

Year	High School Enrollment	Per Cent in H. S. N. C.	Per Cent in H. S. U. S.	Number Graduates	Per Cent Entering H. S. 4 yrs. Previously Graduating
1908	7,144	2.1	5.1	....	...
1918	23,461	5.3	7.8	1,901	25.0
1922	39,169	7.6	12.0	4,213	41.6
1925	67,086	12.0	13.9	8,246	51.8
1928	89,749	15.3	...	11,357	44.6

	Rural			Urban			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1923-24	1,452	2,216	3,668	1,264	2,037	3,301	2,716	4,253	6,969
1924-25	1,686	2,892	4,578	1,368	2,300	3,668	3,054	5,192	8,246
1925-26	1,991	3,533	5,524	1,390	2,252	3,642	3,381	5,785	9,166
1926-27	2,393	4,102	6,495	1,492	2,600	4,092	3,885	6,702	10,587
1927-28	2,663	4,498	7,161	1,615	2,581	4,196	4,278	7,079	11,357
Increase 5-Yr. Period									
Per Cent	83.4	103	95.2	27.8	26.7	27.1	57.5	66.4	63.0
Number	1,211	2,282	3,493	351	544	895	1,562	2,826	4,388

NORTH CAROLINA

RANK OF RURAL WHITE SCHOOL SYSTEMS 1926-27


ASHE
ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
WARREN
NORTHAMPTON
GATES
CURRITUCK
CAMDEN
PASQUOTANK
PERQUIMANS
CHOWAN
HERTFORD
HALIFAX
VANCE
BERTIE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MITCHELL
AVERY
CALDWELL
ALEXANDER
IREDELL
DAVIE
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
MADISON
YANCEY
BURKE
CATAWBA
ROWAN
BUNCOMBE
McDOWELL
HAYWOOD
SWAIN
GRAHAM
LINCOLN
JOHNSTON
GREENE
LEE
RUTHERFORD
CLEVELAND
CABARRUS
HARNETT
WAYNE
LENOIR
CRAVEN
MONTGOMERY
MOORE
STANLY
JACKSON
HENDERSON
POLK
GASTON
MECKLENBURG
TRANSYLVANIA
PAMLICO
CHEROKEE
MACON
CLAY
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
SCOTLAND
ONSLOW
CARTERET
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

▩ COUNTIES SCORING FROM 84.8 to 67.2

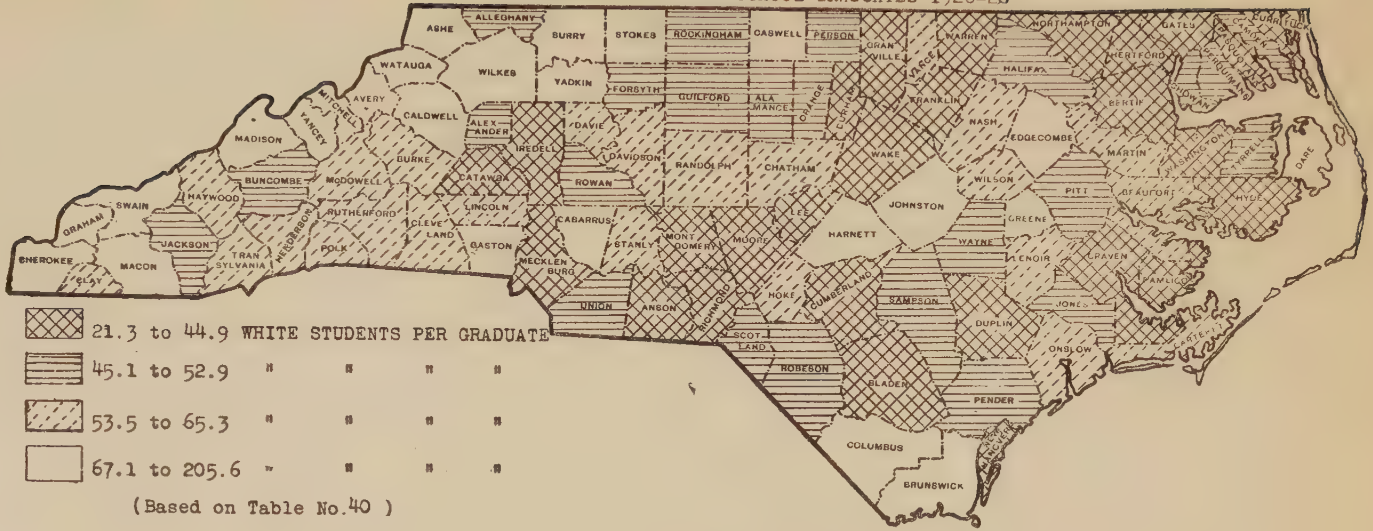
▤ " " " 66.5 to 60.0

▨ ". " " 59.9 to 55.2

☐ " " " 54.5 to 39.7

(Based on Table No. 37)

WHITE PUBLIC HIGH SCHOOL GRADUATES 1926-28



ALLEGHANY
ASHE
SURRY
STOKES
ROCKINGHAM
CASWELL
PERSON
GRANVILLE
WARREN
NORTHAMPTON
GATES
CAMDEN
CURRITUCK
PASQUOTANK
PERQUIMANS
HERTFORD
CHOWAN
HALIFAX
BERTIE
VANCE
FRANKLIN
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
ALAMANCE
ORANGE
DURHAM
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
AVERY
MITCHELL
CALDWELL
ALEXANDER
IREDELL
DAVIE
DAVIDSON
RANDOLPH
CHATHAM
WAKE
WILSON
PITT
BEAUFORT
HYDE
MADISON
YANCEY
BURKE
CATAWBA
ROWAN
BUNCOMBE
McDOWELL
HAYWOOD
SWAIN
GRAHAM
RUTHERFORD
HENDERSON
LINCOLN
CLEVELAND
CABARRUS
STANLY
MONTGOMERY
MOORE
LEE
JOHNSTON
HARNETT
GREENE
WAYNE
LENOIR
CRAVEN
PAMLICO
JACKSON
CHEROKEE
MACON
CLAY
TRANSYLVANIA
POLK
GASTON
MECKLENBURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
CARTERET
ONSLOW
SCOTLAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
▩ 21.3 to 44.9 WHITE STUDENTS PER GRADUATE
▤ 45.1 to 52.9 " " " "
▨ 53.5 to 65.3 " " " "
☐ 67.1 to 205.6 " " " "

(Based on Table No.40)

increases in these items. Nevertheless, progress in high schools has been very rapid during the last decade. The table[22] on page 257 shows at a glance the progress that has been made in white high schools. (It is estimated that there were only 2,000 high school students enrolled in 1900.)

The white public high school graduating class is only 2 per cent of the total school enrollment. The state over, it requires 53 white students to supply one graduate, or so for the two-year period 1926-28.[23] The 100 counties range from Currituck, which graduates one student for every 21.3 enrolled (white) in school, to Stokes, which had one graduate for every 205.6 white pupils enrolled. Of the 11,357 white high school graduates in 1928, 7,079 were girls and 4,278 were boys. This is about the ratio for several years back, except that the girls have widened the margin over the boys. In other words, the girls are an increasing per cent of total graduates. It is interesting to note that during the last five years the number graduating from rural high schools has increased 100 per cent, while the number graduating from city high schools has increased about one-fourth as rapidly. Rural high schools have improved greatly and have rapidly increased in number.

Educational Inequalities. So far an attempt has been made to outline the educational progress of the state, and from the great mass of tabulated data to select a few items that give some indication of how North Carolina ranks with other states in public education. At this place a few facts will be selected to emphasize the point that although the constitution of the state specifically provides for equal educational opportunities for all children in the state, this provision has never been complied with, either by races, or by town versus country, or in rural systems by counties. The city schools are uniformly good, and no contrasts will be made regarding them. Only rural white systems will be considered, since a later reference will deal with Negro education. Choosing only a few items from a vast amount of compiled data, we find the following:

The white rural schools of the best ranking county make an average score (Ayers' index) on all factors of 84.8 per cent, while the poorest ranking county scores only 39.7 per cent. This index covers ten important items. The scholarship of white rural teachers ranges from an index of 711.1 in the best ranking county to 420.6 in the poorest ranking county. (Graduation from high school is 400, from college is 800.) Instructional cost per pupil enrolled is $41.14 in one county, and $15.81 in another. Current school expenditures range from $50.16 per pupil enrolled in one county to $17.98 in another county. School property ranges from $279 per pupil enrolled in one county to $29 in another. One county has 6.8 volumes in the school libraries for each pupil enrolled; another has .2 of a volume per pupil. One county transports 95 per cent of its pupils to consolidated schools; another transports none. The school term ranges from 180 days to 123 days. In three counties every rural child can attend a nine months' school; in the lowest ranking county in this respect only 17.1 per cent can attend an eight months' school. In one county 26.5 per cent of the pupils are enrolled in high schools; another has no rural children enrolled in high school. One county graduates from high school one pupil for every 21.3 enrolled; another county has one graduate for every 205.6 pupils enrolled. These are only a few illustrations, selected at random, to show the vast inequalities in white rural educational opportunities for the year 1928.[24]

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[22] Compiled from official state records.

[23] *News Letter,* vol. XV, no. 22.

The County-Wide Plan. In the past the schools were run on a district plan and are so run largely at present. The quality of educational opportunity varies with the district lines, high in one district, low in an adjoining district. The present policy in the state is to improve schools by adopting a county-wide school system, which is a step in the right direction. About one-fifth of the counties have already adopted the county-wide plan. This system does away with the small district school and the small school districts. It tends to equalize the school advantages of all children within the county, irrespective of local wealth and willingness.

The following are the main features of the county-wide school plan:

1. Only one system of schools for the whole county.
2. One superintendent for the whole county.
3. A principal for each high school.
4. At least an eight months' term for the whole county.
5. The establishment of an adequate number of high schools.
6. Transportation to schools where necessary.
7. Better schools in every meaning of the term.
8. An equal opportunity to every child in the whole county.
9. All property in the county to bear the same tax rate, for school purposes.

The county-wide idea is a great improvement over the local district idea, and it is the next logical step forward. But it should not be the ultimate goal. Instead of a county-wide we need a state-wide school system, with strong county units, in which every dollar of taxable wealth in the state goes to support every school child in the state. Educational opportunities for all children will never approach equality until a state-wide school system is adopted. Public education is the business of the state, and school facilities should be fairly equal for all children, irrespective of place of birth.

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[24] From various issues of *State School Facts* and the *News Letter*.

As long as teachers' salaries are three times as high in one county as in another, one county will have excellent schools and the other will have schools hardly worthy of the name. Such is the present situation in North Carolina, and there seems to be no real remedy except a state-wide system of public education.

Negro Education. So far a discussion of Negro education has been omitted. North Carolina is generally credited with having the best Negro schools of any southern state and the best attitude toward her Negro population. Naturally Negro school facilities are not as good as the white facilities, but in many respects the differences are not so very great. Remarkable improvement has taken place in all respects in recent years.

Two bulletins recently issued by the United States Bureau of Education[25] show that North Carolina ranks at or near the top among the southern states in all phases of Negro education. These two bulletins are sources of the following facts and comments:

Although North Carolina ranks fifth in Negro population, only Mississippi has more Negro children enrolled in public schools. The state apparently has a larger percentage of its Negro population enrolled in school than any other state. In number of public schools for colored pupils and in number of Negroes enrolled in high school, North Carolina is surpassed only by Texas. North Carolina has 63 high schools and Texas 69. There are only 425 in the entire United States. It seems evident that North Carolina ranks high in secondary public schools provided for Negroes.

The state is making rapid strides in the promotion of higher education for the benefit of its Negro population. There are twelve Negro institutions of higher learning in the state, five of which are publicly supported and controlled. The list follows: The Negro Agricultural and Technical Institute, Greensboro; Bennett College for Women, Greensboro; Joseph K. Brick Junior College, at Bricks; State Normal School for the Negro Race, Fayetteville; Johnson C. Smith University, Charlotte; Kittrell College, Kittrell; Livingstone College, Salisbury; Shaw University and St. Augustine's School, Raleigh; Winston-Salem Teachers' College, Winston-Salem; North Carolina State Colored Normal School, Elizabeth City; and North Carolina College for Negroes, Durham.

The geographical distribution of these colleges is excellent, every section of the state having at least one institution conveniently located for the higher education of its Negro inhabitants. Only in two cases is more than one college located in the same city, two being situated at Raleigh, the capital of the state, and two at Greensboro. One of the latter is a men's and the other a women's college.

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[25] D. T. Blose, *Statistics of Education of the Negro Race; Survey of Negro Colleges and Universities*, chaps. 1, 2, and 3.

Negroes attending these 12 colleges in North Carolina number 1,351 out of a negro population of 829,000. There are 16 members of this race obtaining higher learning for each 10,000 Negro inhabitants. The high proportion of Negroes in North Carolina enrolled in these colleges is in part accounted for by the consistent policy of the state in developing secondary schools for Negroes. The records show that 8,197 Negro youths are in attendance at high schools, or 98 for every 10,000 population. The white high-school enrollment averages 382 per 10,000 population.

Responsibility for the advanced stage of Negro higher education in North Carolina is due to favorable public sentiment existing in the state and to the activity of the state department of education. A complete division of Negro education, headed by a director with eight assistants, is maintained in the department. The state-supported Negro teacher-training institutions are under the direct supervision of the department of education in most cases, and inspections are made of them by the director several times a year. Privately supported colleges are also examined at frequent intervals upon the basis of coöperation in their development.

The department publishes and keeps on file a list of accredited Negro higher educational institutions located both in and outside of the state. High standards are required before approval is extended to the institutions, which are classified into junior colleges, normal colleges, normal schools, and senior colleges. North Carolina, through its department of education, exercises direct supervision over the summer schools conducted at all the colleges, both public and private, in order to promote the training of public school teachers. Negro schools which offer college courses are also organized by the department in every county in the state during the summer vacation season.

Expenditures for Negro higher education by the state of North Carolina for the biennium 1927-1929 amounted to $882,500, of which $457,500 was for maintenance and $425,000 for capital outlays.

In addition to the above facts and comments from official federal publications, it is interesting to note that North Carolina ranks first in the number of Negro schools built in coöperation with the Rosenwald Fund.

Colleges and Universities. This study is concerned primarily with public elementary and secondary education. Lack of space forbids any general discussion of our colleges and universities. However, this chapter would be incomplete without a brief reference to them.

North Carolina has the following institutions for whites: 15 four-year standard colleges, including the University of North Carolina and Duke University; 3 four-year Class B colleges; 12 standard junior colleges; 1 school giving one year of college work; 1 standard teachers' college; and 4 standard normal schools. Institutions for Negroes, listed above, include: 2 four-year standard colleges; 3 junior colleges; 1 school giving one year of college work; and 4 standard normal schools.[26]

The state-supported institutions include the University of North Carolina, North Carolina College for Women, the State College of Agriculture and Engineering, East Carolina Teachers College, and four standard normal schools, all for whites; the North Carolina Agricultural and Technical College and four standard normal schools for the colored people. The remaining colleges and schools are church or privately supported institutions.

The state University is not only the largest educational institution in the state, but has the distinction of being the oldest state university in the United States, having been chartered in 1789 and opened in 1795. The corner stone of Old East Building was laid in 1793. Duke University is one of the most heavily endowed universities in the world. When the present construction program is completed, Duke will have a plant valued at around $20,000,000.

Data compiled by the *Manufacturers Record,* covering the year 1926, show that for the area south of Maryland and east of the Mississippi, North Carolina stands first in higher education. The following items are significant. Within this same area the state ranks first in students enrolled in colleges and universities, with 15,567 students; first in college endowment; first in college libraries; first in value of college buildings, and first in value of equipment. With the completion of Duke University the lead will be commanding.

The college and university facilities of North Carolina have expanded enormously during the last decade. By 1920 the high schools had begun to turn out a large number of graduates, many of whom were seeking a college education. The colleges became overrun with students. Expansion was necessary. The colleges today can care for the present demands, but continued expansion will be necessary in order to care for the ever increasing number of high school graduates.

The fact that North Carolina today leads all the South, except Texas, in enrollment in public schools, in high schools, and in colleges, is evidence that the long struggle for education has borne fruit. The problem for the future is as nearly as possible to equalize educational opportunities, the first step in which should be the substitution of a minimum compulsory school term of eight months for the present constitutional minimum term of six months. The second step should be the adoption of a state-wide system of public education, in which at least minimum standards would be supported by the entire wealth of the state.

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[26] *Accredited Higher Institutions.*

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CHAPTER XVI

ILLITERACY AND READING HABITS

Illiteracy and Near-Illiteracy

Despite the gains made in education, as shown by the preceding chapter, North Carolina is now and always has been a state with an excessive amount of illiteracy and near-illiteracy, a state of non-readers, compared with other states. Our low position as a reading state is in a large measure due of course to the extent of illiteracy and near-illiteracy. The various censuses report the amount of sheer illiteracy, but there are no data on the amount of near-illiteracy. It is well known that those in the latter class far outnumber the former and constitute therefore a much more serious problem.

How the State Ranks. The 1850 Census shows that 13.3 per cent of the white men and women in North Carolina, 20 years old and older, were illiterate. The total number at that time was 33,504. The 1910 Census shows that 15 per cent of our native white men and women, 21 years old and over, were illiterate, and that the total number of such white illiterates was 105,912. Not only did the total number of white adult illiterates increase during this interval, but the per cent of such illiteracy also increased. Our total white population during these 60 years increased from 553,028 to 1,500,511, or 171 per cent; but our adult native white illiterates increased from 33,504 to 105,912, or 212 per cent.

According to the 1920 Census there were 241,603 people in North Carolina ten years of age and over who could neither read nor write in any language. The illiterates were 13.1 per cent of all people ten years of age and over. They were distributed as follows: native white of native parentage, 104,637; native white of foreign parentage, 171; foreign-born white, 474; Negro, 133,674. There were only 190 white people in the state unable to speak English.

Of all native white people ten years of age and over, 8.2 per cent were illiterates. Only two states, New Mexico and Louisiana, had a higher per cent. Only one state, Kentucky, had a larger total number of native white illiterates. Only six states had a larger total number of illiterates, both races considered, than North Carolina. Their excessive illiterate Negro population explains why four of these states rank ahead of North Carolina.

Five states have more illiterate Negroes than North Carolina with a total of 133,674. According to the 1920 Census, 24.5 per cent of all Negroes in North Carolina ten years of age and over are illiterate.

The rate is higher in only five states. The Negro ratio of population is much larger than ours in each of the states whose illiterate rate is above ours. Nine southern states have lower Negro illiteracy rates than North Carolina. These are usually states with small Negro population ratios. The Negro illiteracy rates are largely in proportion to population ratios—high in states with large Negro ratios and low in states with few Negroes.

The following brief table is compiled from the 1920 Census of Population:

Population, 1920	Total Illiterate		Native White Native Parentage		Negro	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
THE STATE						
10 Years and Over	241,603	13.1	104,673	8.2	133,674	24.5
21 Years and Over	204,492	16.9	90,642	10.7	111,109	32.4
URBAN						
10 Years and Over	35,671	9.3	10,009	4.0	25,345	20.4
21 Years and Over	31,581	11.5	8,586	4.8	22,694	25.8
RURAL						
10 Years and Over	205,932	14.1	94,664	9.2	108,329	25.7
21 Years and Over	172,911	18.5	82,056	12.2	88,415	34.7

Population, 1910	Total Illiterate		Native White Native Parentage		Negro	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
10 Years and Over	291,497	18.5	131,992	12.3	156,303	31.9
21 Years and Over	232,226	22.6	105,912	15.0	123,709	40.4

From the above table it is seen that illiteracy in North Carolina is mainly an adult problem and that the bulk of illiterates live in the country. A good many of the urban illiterates were bred in the country and have since moved to town. This is especially true of those in the industrial western half of the state. Illiteracy of all ages, races, and both sexes, then, is mainly a problem of rural adults in North Carolina as in other southern states.

The table also shows that the Negroes outnumber the whites in total illiterates and far outnumber the whites on a per cent illiterate basis. A third point revealed by the table is that the number and per cent illiterate have declined since 1910. It is very likely that the 1930 Census will reveal gratifying progress since 1920, but this will come largely from deaths among adult illiterates rather than from efforts made to abolish adult illiteracy.

The Curse of Illiteracy. Looked at from any angle, however, North

Carolina makes a poor showing in this essential matter. Illiteracy and near-illiteracy have long cursed North Carolina, and North Carolina has been slow to help the unfortunate illiterates. Dr. Branson says:

> The essential curse of illiteracy lies in the suffocating loneliness it imposes. The world the illiterates live in is mainly the little world of the home and the neighborhood. They are cabined, cribbed, confined by the here and the now. They are heirs of all the ages, to be sure, but they cannot claim their birthrights. The accumulated wisdom of the race reaches them in traditions passed on by word of mouth alone. The great tidal-waves of history break in tiny ripples on their far distant shores only after many days. They are oftentimes dowered by nature with magnificent possibilities, their brains and fingers are nimble, their characters are substantial, fine, and capable, but they live in a pint-cup world where the largest men are small and the largest achievements little—a drab and uninspiring world. Their wits stew in their own broth, they fry in their own fat. Oftentimes they are people of the very finest character and capacity, good neighbors and upright, law-abiding citizens. The unlettered are not necessarily stupid in brain and sodden in life, but they have only a bare chance to cash in their possibilities at their full value. They may be and often are gems of purest ray serene, but they are lost in the dark, unfathomed caves of illiteracy, the world forgetting and by the world forgot. They are diamonds in the rough that never can be marketed for lack of polish.[1]

How the Counties Rank. The illiterates are not uniformly distributed over the state. Indeed, there is a wide difference between the county that makes the best showing and the county that shows up worst. Assuming that illiteracy is mainly an adult white problem, since curing white illiteracy must precede curing Negro illiteracy, let us see how the counties rank. New Hanover County with only 1.7 per cent of illiteracy among her adult white males, and 3.1 per cent of illiteracy among her adult white females, ranks best in the state. Wilkes County, with 20.8 per cent of her adult white males, and 25.3 per cent of her adult white females illiterate, according to the 1920 Census, makes the worst showing. The remaining ninety-eight counties fall between these two extremes. New Hanover has a rate approximately the same as the United States average, the only one in the state making as good a showing in adult white illiteracy as the average for the nation as a whole.

There are forty-two counties in the state, each of which has more than one thousand native white illiterates ten years of age and over. Wilkes leads in number with 3,601, followed closely by Gaston, our premier textile manufacturing county, with 3,439.

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[1] *News Letter,* vol. XIII, no. 18.

Considering white illiteracy alone, the Albemarle country makes the best showing of any area in the state. The next best is made by the mid-state counties. A poor showing is made by the lower Cape Fear country and the contiguous Tidewater region, while the poorest is made by the Carolina Highlands and the contiguous northern Piedmont region. A few of the central Coastal Plain counties, where farm tenancy predominates, also make a very poor showing in illiteracy. There is probably no other area in the United States that has as high a percentage of adult white illiteracy as the rural counties of the Carolina Highlands, unless it is the near-by mountain country of Kentucky and Tennessee. Approximately one-sixth of the adult whites of the North Carolina mountain country can neither read nor write. The ones who can barely read and write are far more numerous.

If whites and Negroes are combined, then the cotton and tobacco belt counties centering around Wilson County make the poorest showing, due to the high rate of illiteracy among the Negroes and the prevalence of illiterate white farm tenants.

Tenancy and Illiteracy. Illiteracy and near-illiteracy exist in North Carolina under two conditions mainly: (1) in the remote rural regions of small accumulated wealth and income, as in the Carolina Highlands, and (2) in areas of excessive farm tenancy, as in the cotton and tobacco belt.

A study of the economic and social conditions of one thousand farm homes[2] in six townships located in three typical regions of the state throws some light on the influence of tenancy on illiteracy and near-illiteracy. The average for North Carolina would be practically the same as the average for these 1,000 farmers in three typical counties of the state, Edgecombe, Chatham, and Madison.

CLASS	AVERAGE GRADE REACHED
White Operator Landlords	6.40
White Owner Operators	4.33
White Tenants	3.97
White Croppers	3.07
Negro Owner Operators	2.95
Negro Owner Landlords	2.00
Negro Tenants	1.55
Negro Croppers	.98

If these 1,000 farmers are typical of the state, then the average white farm owner in the state has about a fifth grade education, while the average white tenant has finished less than three and a half grades, since the bulk of our tenants are croppers. The average Negro owner has about two and a half grades of schooling, while the average Negro tenant has barely more than finished the first grade, since the great majority of them are croppers. The illiteracy rates are much higher for the low-economic status groups, the croppers and tenants, than for the farm owners.

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[2] C. C. Taylor and C. C. Zimmerman, *Economic and Social Conditions of North Carolina Farmers.*

North Carolina has not been very active in attempting to reduce adult illiteracy. For three or four years immediately following the World War, the State Department of Education had a bureau charged with attempting to reduce illiteracy in the state. The director of this bureau resigned after a few years, and since her resignation little has been done. In 1928 the governor appointed a committee on illiteracy, but it has not been very active. The outstanding piece of work in the campaign to reduce illiteracy in North Carolina has been directed by Mrs. Elizabeth Morriss in Buncombe County.

Reading Habits in North Carolina

In this section it is proposed to make a general survey of reading habits and reading facilities in North Carolina, since they are closely correlated with illiteracy and near-illiteracy.

Production and consumption of literature seem to be closely related. At least this has been true in North Carolina. An excellent survey of the literary achievements of North Carolina has been prepared by one of our noted literary critics[3] who covers our achievements in the fields of drama, poetry, history, biography, fiction, and oratory. Prefacing his survey, Dr. Henderson says:

> The spotlight of national notice has been focused on North Carolina within very recent years. Material prosperity, economic success, progressive legislation have attracted the rays of this spotlight. So extraordinarily good are our state highways that the visitor, astounded by the percentage of hard-surface mileage, grows vaguely suspicious of such luxury, fearing that there is a catch in it somewhere. Our heroes are politicians, bankers, good roads experts, textile manufacturers. The scholar for the most part remains unnoticed, unnoted and unknown; the literator is perhaps the least regarded of all the major figures of our boasted "civilization." In North Carolina, in the past, to be an artist has been to be a nonentity.
>
> Significant changes are beginning to register upon the sluggish consciousness of our people. There seems to be slowly developing some faint stirrings of appreciation of art and science, and the aesthetic manifestations of a cultured civilization.

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[3] Archibald Henderson, "Outline of the Literary Achievements of North Carolina," *The Christian Science Monitor,* Nov. 6, 1926.

The record which follows the introductory remarks is not so convincing. There are a few bright spots. In the early days we achieved some distinction, especially in the fields of drama and oratory. Our record in oratory is perhaps the best of all. There has lately been a reawakening in North Carolina, and our recent record of literary achievements is fairly complimentary. But for the interim the record is rather barren. We are reminded of the oft-quoted lines from Coogler's pen:

Alas for the South, her books have grown fewer,
She never was much given to literature.

Dr. Henderson says, "The poetic *obiter dicta* apply with peculiar fitness to North Carolina." He summarizes his survey of our literary achievements with the following remarks, which at least give hope for the future:

> The record is curious: on the whole meager, in spots brilliant. Our history is not nationally known, because we have not written it. Our great national characters remain to be discovered by the rest of the nation, because we have not produced biographers. Memorable events, dramatic crises, glorious traditions, associated with our history, are hidden in obscurity—because we have not produced the poets and the story-tellers. "Massachusetts, my native state," said Henry Sherman Boutelle, in a memorable address at the University of North Carolina some years ago, "has furnished the nation with most of her heroes; not because North Carolina and the other states of the Old Thirteen had no heroes, but because Massachusetts had the poets."
>
> North Carolina has produced no considerable body of writing, of various literary types, worthy of inclusion in the history of American literature. Still pertinent, if in lesser degree today than in June, 1865, are the burning words inscribed in her journal by that passionate crusader for North Carolina's progress and the reopening of the state university, not herself a native of this soil, Cornelia Phillips Spencer:
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> "Oh, beloved and sunny South, land that I love, more now in the day of humiliation, woe and ruin than ever before, thy day of regeneration will never dawn till thou hast learned to dig deep, and lay thy foundations broad and firm—learned to educate thy children thoroughly—learned to distinguish gold from gilding, silver from tinsel."
>
> Today North Carolina is awake. Universal education is on the way, and nothing can stop it. Literature will come in its wake. Already signs of promise are accumulating along the horizon. Perhaps in a future nearer than we dream, the awakened self-consciousness and self-respecting pride of our people will burgeon forth in rich and creative art.

Reading Habits Measured. Due to an exhaustive investigation[4] into the reading habits of the respective states, we are able definitely to place North Carolina as a reading state. The study approaches the subject from several angles.

First, North Carolina is ranked in the reading of forty-seven leading magazines, covering all types, with a nation-wide circulation. On the basis of inhabitants per magazine coming into the state in 1924, North Carolina ranked forty-third, with one magazine for every 8.77 inhabitants. California led with one magazine for every 1.84 inhabitants, and Mississippi was last with one magazine for every 12.49 inhabitants. Similarly, the states were ranked in the reading of eleven women's magazines. Again, North Carolina ranked forty-third with one of these women's magazines coming into the state for every 18.06 inhabitants. California led, and Mississippi ranked last.

A leading newspaper publisher of the state gave it as his opinion that North Carolina would show up better as a reader of high quality magazines; so eleven literary magazines were selected, and the states ranked as readers of magazines such as the *American Review of Reviews*, *Century*, and *World's Work*. In this study North Carolina ranked forty-fourth, with one of these literary magazines for every 72.19 inhabitants. In the reading of the *True Story* type of magazines North Carolina ranked thirty-seventh!

In the reading of daily newspapers, North Carolina was forty-third, with a copy of one daily newspaper published in the state for every 9.74 inhabitants. In other words, if no family took more than one daily paper, there would be a copy for every two families in the state. Probably not more than one-third of the families of the state receive a daily newspaper. In this study California led, and Mississippi ranked last.

Another approach was to rank the states according to inhabitants per volume in public libraries. In this particular North Carolina was at the bottom, with 11.17 inhabitants for each volume in her public libraries. Massachusetts led, closely followed by other New England states, where nearly every town has its public library. It is estimated that only 21.7 per cent of North Carolina's population has access to a public library. The percentage is lower in seven states, all of which are excessively rural.

A final study ranked the states according to inhabitants per volume in college libraries. In this particular North Carolina ranked thirty-seventh, thanks mainly to the University of North Carolina library, which is second only to the library of the University of Texas in the South. In 1922 North Carolina had one volume in her college libraries for every 8.39 inhabitants. It might be interesting to note that our college libraries contain more volumes than all the public libraries of the state.

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[4] Orlando Stone, "Does North Carolina Read?" MS, Institute for Research in Social Science, University of North Carolina, 1925.

This exhaustive survey forces one to conclude that North Carolina ranks not better than forty-third as a reading state. Our relatively high rank (thirty-seventh) in college libraries is offset by our last position in public libraries. Indeed, to place the state forty-third involves a slight degree of generosity, especially in view of our position in public library facilities.

Reading in Rural Homes. It has already been suggested that the low rank of North Carolina as a reading state is due to several factors, among them: excessive ruralism, a fairly large Negro population ratio, farm tenancy, small cash income for a large per cent of our population, illiteracy, and near-illiteracy. Of these perhaps the chief reason is ruralism with its isolation. The bulk of our people are farmers and small town dwellers, who have practically no access to public libraries. They take few magazines or daily newspapers; often they take the country weekly. In the part of Mr. Stone's study dealing with reading habits in rural homes, he summarizes his findings as follows:

> To what extent is our low rank attributable to the excessive rural population ratio of the state? Three years ago a complete survey of two entire townships disclosed the facts in a mid-state county. In this brief article we are presenting some facts recently gathered from what we believe to be a typical rural township in eastern North Carolina. The facts are gathered from one hundred white homes in a township in Duplin county. . . . The information was secured by the questionnaire method, the data being filled in by the author in a house-to-house survey. The information is direct and accurate. It is believed that the families surveyed can be said to represent a cross-section of rural North Carolina. Ninety-four family heads pursued farming, three merchandising, one contracting, one brick-laying, and one preaching.
>
> The following table [see page 274] shows the current reading facilities in these one hundred white homes.
>
> Farm papers seem to be most popular with these families, followed by weekly news sheets. Children were found in a big majority of the homes, yet only one home took a children's paper. The fact of most significance, however, is that 46 per cent of these farm families take no paper or magazine of any sort whatsoever. If this township is typical of rural North Carolina—and a survey of more than three hundred homes in two other townships gave about the same results—then there are nearly one hundred thousand white farm homes in the

Types	No. Papers & Magazines Taken	Per Cent Families Taking Papers & Magazines
Dailies	21	17
Weeklies	41	37
Children's papers	1	1
Farm papers	47	39
Church papers	15	14
Magazines	16	16
Others	9	5

Per cent of families taking papers or magazines, 54.

state, representing a half million white people, where no reading of current literature is to be found. How much do these people know about what is happening in the world about them? What do the children and grown-ups do with their leisure time? These are significant facts and questions.

To get a complete picture of reading facilities and habits it is necessary to know, in addition to the facts about current reading matter, the facts about books in these one hundred white homes. The following table is an analysis of the facts gathered from an actual count.

Type	Number of Books in Homes	Per Cent Families Having Each Type
Religious:		
Bible	121	98
Others	37	17
Agriculture	0	0
Fiction	63	14
Children's books including school textbooks	341	47
Literature and history	13	8
Almanacs	103	47
Catalogues	109	84
Others	98	19

The per cent of families having books other than the Bible, school textbooks, almanacs, and catalogues was 21.

In other words, 79 per cent of the white families possessed no books of a general reading nature. Since practically no country people have access to public libraries, the conclusion is that about four-fifths of the country people of the state do not read books, and never have any chance to read them.[5]

The most generally owned book in North Carolina is the Bible. Mr. Stone believes, however, that the most widely read volumes in

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[5] *News Letter,* vol. XI, no. 32.

North Carolina are mail-order catalogues and almanacs. He bases his belief on his observations of the signs of use shown by such catalogues and almanacs, which are found in almost every rural home in the state, as well as in many of the urban homes.

How the Counties Rank. It is very difficult accurately to rank the counties in reading habits, since only a few publishers keep their records by counties. The circulation of eight prominent magazines is kept by counties, and the counties have been ranked[6] according to inhabitants per one of these eight magazines going into the county. Buncombe, an urban county with a high white population ratio and the lowest total average illiterate rate in the state, makes the best showing with a subscriber to one of these eight magazines for every 6 inhabitants. Graham County ranks last with one of these magazines for every 87.78 inhabitants.

There are great differences in the reading habits of the people of the state when the counties are grouped according to geographic areas. In the Piedmont section, comprising 39 counties west of Raleigh and up to the tier of counties bordering east of the Blue Ridge, there is an average of one copy of the above magazines for every 13.33 inhabitants. In the mountain area, comprising 23 western counties, there is one copy for every 17.57 inhabitants. In the Coastal Plain area, consisting of 38 counties east of Raleigh and Rockingham, the average is one copy for every 20.78 inhabitants. In other words, the people in the counties of the Piedmont section seem to be reading 32 per cent more than those in the Mountain area, and 56 per cent more than those of the Coastal Plain. One immediately becomes interested in the question, Why does this difference exist?

The people of Piedmont Carolina read most. Is it because of greater means of contact, and because urban people read more extensively than those in rural districts? Why is it that the Mountain area, where nature has made contacts difficult, ranks above the Coastal Plain area? This is one of the surprising facts brought out by the study. Perhaps the racial element largely explains the low rank of the eastern counties. The Negro population is largely centered in the Coastal Plain area, a dozen counties having Negro majorities. In only two counties in the Mountain district is there more than 12.5 per cent of the population Negro. But this in itself is not altogether explanatory. There are many more Negroes per 1,000 inhabitants in the Piedmont than in the Mountain area, yet the people in the Piedmont read the eight magazines considered 32 per cent more extensively than do the mountain people. Evidently urban ratios in the Piedmont more than offset high white ratios in Mountain counties.

Other factors which affect reading habits of different counties are accessibility, means of contact, illiteracy, efficiency of school systems, size and number of public and school libraries, per inhabitant wealth, and many others of varying importance.

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[6] *News Letter,* vol. XI, no. 27.

The counties that rank high in aggregate wealth per inhabitant rank high in reading, and vice versa.

Counties that have a large percentage of their population urban read extensively, while those that have a large per cent of their population rural rank low in reading. There is a very high correlation between the percentage of urban population and the quantity of reading done in the state.

Again, the question of farm tenancy enters in. The counties that have a large percentage of their farms operated by tenants and croppers rank relatively lower in reading than those that have a larger percentage of landowners.

Likewise, the problem of illiteracy has its influence. Buncombe County, which ranks first in the table, has the lowest illiteracy rate of any county in the state. Other counties that rank high in reading, like Guilford, Moore, Rowan, and others, have low illiteracy rates.

There is a definite positive correlation between library facilities and reading habits. The Piedmont section of the state has more volumes relative to its population than any other section.

THE WAY OUT

There are two chief channels through which illiteracy and near-illiteracy can be reduced and reading habits promoted in the state. These are through universal education coupled with compulsory school attendance, and improved public library facilities. Not a great deal can be done about adult illiteracy, but we can see to it that the next generation shall include no illiterates.

The reading habits of this state can be vastly improved through a system of public library service that makes books available to all the people of the state. As has been shown, we now have the poorest public library resources of any state, and there is no evidence from a review of the past that we have ever ranked better than we do today. Indeed, most of our improvement has taken place during recent years. It might be interesting to note the high spots in the development of public libraries in North Carolina[7] as compiled by Dr. L. R. Wilson:

> In 1897, just twenty-five years ago, the city of Durham established the first free, public, tax-supported library in North Carolina.
>
> In 1901, the legislature passed the rural school library law and appropriated $7,500 annually for the establishment of school libraries. In 1920, at the end of twenty years, 4,960 of the thirty-dollar and 2,331 of the fifteen-dollar libraries had been placed in approximately

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[7] *News Letter,* vol. VIII, no. 45.

one-half of the schools, both white and colored, and the total collections numbered between 500,000 and 600,000 volumes.

In 1902, the North Carolina Federation of Women's Clubs established its department of libraries. Today the department is heartily supported by the 10,526 members of the Federation, and through it every form of library activity is being promoted. During 1921 and 1922 alone it has been largely instrumental in the establishment of twelve subscription or public libraries.

In May, 1904, the North Carolina Library Association was formed at a meeting in Greensboro with four North Carolina librarians and the late Charles Duncan McIver in attendance. The Association today has a membership of several hundred, and in September and October of this year will hold six district meetings throughout the state.

In May-June, 1907, the American Library Association, with more than 500 delegates, held its annual session in the city of Asheville, the meeting being the second held in the South.

In March, 1909, the Legislature established the North Carolina Library Commission and gave it an annual appropriation of $1,500. In 1921, its appropriation was increased to $17,500, and it circulated 15,639 pieces of material in package libraries, 616 traveling libraries of 40 volumes each in 414 stations in 98 counties, and promoted in a systematic way the various library interests of the entire state.

In October, 1912, the Dialectic and Philanthropic Literary Societies of the University of North Carolina, with the coöperation of the University Extension Division, established the High School Debating Union, an organization which in the ten years of its existence has actively involved a total of from 10,000 to 20,000 high school boys and girls, all of whom have been taught something concerning the careful use of library material.

In 1921, the Southern Association of Colleges and Preparatory Schools passed a regulation that no high school could be placed on its accredited list which did not have a minimum of 500 volumes in its library exclusive of duplicates and public documents. Following this lead the State Department of Education of North Carolina has passed a similar though modified ruling, and issued in 1922 a splendid list of books from which libraries could be selected.

In 1910, the first year in which the Library Commission summarized the library statistics of the state, 39 public or semi-public libraries reported a total income of $25,386; volumes added during the year 13,362; total number of volumes 101,169; periodicals received 679; number of registered borrowers 35,820; total circulation 221,508. The corresponding figures for 1921 were: 67 libraries (three colored) with total incomes of $83,031.03; volumes added during year, 22,162; total number of volumes, 213,408; number of registered borrowers, 85,882; total circulation, 727,905.

In 1910, the figures for the schools and colleges were: 35 institutions including State Library, Supreme Court Library, and nine colored schools; volumes added, 13,509; total number of volumes, 293,172;

total periodicals received, 1,786. In 1920, 33 institutions reported volumes added, 25,479; total number of volumes, 444,313; total periodicals received, 2,807.

Rapid progress has been made since 1920, especially in our college library facilities. A few public libraries have been very active. There is now a new and vigorous organization of public-spirited citizens who have set about to accelerate the growth of public libraries in the state. A comprehensive organization has been perfected and undoubtedly conditions will rapidly improve.

Dr. L. R. Wilson makes the following proposals towards meeting the needs of public library development in North Carolina:

1. A tax supported, county-wide public library in North Carolina; or adequate county support of existing libraries for adequate county library service.
2. Appropriations in the various cities for library purposes to equal $1 per capita instead of the 18 cents now prevailing.
3. A high school library fund supplied by the state and the counties for the steady and adequate upbuilding of high school libraries. The minimum annual expenditure for books alone should be fifty cents per year per pupil and at least $25 should be spent annually for periodicals.
4. A school library inspector to systematize the work of school libraries and make them effective instruments in their communities.
5. Regular instruction at the University for teachers and librarians in the proper administration of city, county, and school libraries.
6. An individual, or group of individuals, connected with every school, college, city, or county library who will give both time and money to the upbuilding of a state-wide, adequate North Carolina library system.

In promoting county library work in the average North Carolina county, whether on a strict county basis or in coöperation with a municipal library, the following minimum requirements are necessary to insure efficient, adequate service:

1. A minimum annual income of at least $7,500, preferably $10,000, should be provided.
2. A head librarian, two assistant librarians, and janitor should be employed.
3. From $2,000 to $4,000 should be set aside annually as a book and magazine fund.
4. A definitely planned system of delivery, either through parcel post or through motor truck service, or both.

Hope in North Carolina lies chiefly in the establishment of a county-wide public library in every county, or on a county-group basis for the smaller and less populous counties, with facilities for getting the books into the homes of the farm people. The California plan of county-wide library service with motor trucks to carry the books to the people is proposed as the chief means by which North Carolina can become a reading state, and therefore a state possessing a more intelligent citizenship. One hundred motor trucks loaded with good books and daily circularizing the rural regions of North Carolina would greatly jack up the level of our rural and small town civilization. A traveling library service that would reach almost every rural home in the state could be maintained at not more than five per cent of the present cost of our public school system. Such an expenditure would handsomely repay the state.

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CHAPTER XVII

PUBLIC HEALTH AND HEALTH WORK

North Carolina today is perhaps the best sanitated state in the Union. This has not always been true. In fact, just a few years ago the state had a very high death rate and a reputation of containing a population sallow with malaria, anemic from hookworm, ravaged by frequent epidemics of typhoid and smallpox, and debilitated by tuberculosis. The change which has lifted North Carolina's health rank from near the bottom to near the top has been brought about largely within the last two decades, beginning in 1909, when Dr. W. S. Rankin[1] was secured to direct the work of the State Board of Health. Great credit is due especially to Doctors Wood and Lewis for their excellent pioneer work as heads of the State Board of Health during its first thirty-two years of existence.

Brief History of Public Health Work. Following is a brief history[2] showing the development of public health work in North Carolina.

North Carolina organized her State Health Board in 1877 ahead of 36 other states of the Union. As early as 1879 its members were discussing the disinfection of drinking water, drainage, sanitary engineering, the limitation and prevention of diphtheria.

Around the year 1880 when the population of the state was rather less than one and a half million souls, the State Health Board was given $100 by the legislature, or only one cent for every 150 inhabitants.

The registration of vital statistics began after a fashion in 1881. Its first bulletin was published in 1886 and the leading paper in it was on Care of the Eyes and Ears. 1893 ushered in legislation for improved reporting of contagious diseases; the protection of school children from epidemics; the examination of public water supplies; and the regulation of common carriers. In 1894 health conferences were held in several parts of the state and the next year two bacteriologists were added to the staff of the Board. The first examination of municipal water supplies was ordered in 1896, under Dr. Francis P. Venable at the University. The same year Doctors Anderson and Pate made the first bacteriological tests of the Board. The hookworm campaign began in 1903, in 1904 resolute field work against tuberculosis got under way, followed in 1907 by the foundation of the State Tuberculosis Sanatorium.

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[1] Dr. Rankin resigned in 1927 to head up the hospitalization work of the Duke Foundation.

[2] By E. Noa, formerly librarian, Department of Rural Social-Economics, University of North Carolina.

Beginning early in 1915 the State Board of Health through what is now its Bureau of Medical Inspection of Schools commenced a thorough survey of several thousand children enrolled in the schools of different counties in widely separated sections to find out the actual physical condition of all classes and ages of pupils. These efforts established the appalling fact that from 75 to 80 of every 100 school children were suffering from decayed teeth, or, what is worse, not over 5 per cent of them had ever visited a dentist for preventive or reparative work. Place of residence seemed to make no difference—the teeth of children from cities, small towns, and country alike being bad. These facts were well borne out by the first draft figures.

When the present department of Medical Inspection of the State Board of Health was organized in 1917, the director of the department determined that some effort at getting children treated should be undertaken or he would recommend the dissolution of the department. As a result of this determination, early in 1918, two specific lines of endeavor were undertaken. One was the employment by the department, on a whole-time salary basis, of a number of young dentists. These men were sent out into the schools, in the country districts especially. Their services have been rendered only to school children, and the ages have been from 6 to 12, because that is just when most good can be done and also when work is needed. The work has been totally free to the people and is the first effort of its kind in the United States providing service of this class wholly at public expense on an extensive scale as a business proposition, entirely apart from the realm of philanthrophy and charity.

The matter of getting surgical operations done for children in remote sections was a much more difficult problem; but, beginning in the same year, 1918, experiments were made through the grouping in clubs of several children needing these operations badly, and a specialist from a near-by city was requested to hold the clinic. A school building, a courthouse, sometimes a local hospital, or any suitable place was equipped as an emergency hospital. Nurses employed by the department were placed in charge, and from the beginning of the plan every care possible has been given these children. It has proved immensely popular and has been successful in the fullest measure.

North Carolina has the enviable record of having provided the first county health department in the United States in the Guilford department, established on June 1, 1911. Yakima County, Washington, was the second, established exactly a month later, after a most severe epidemic of typhoid fever there.

Today Ohio is the only state with a larger number of whole-time county health officers than North Carolina, which now has 39 full-time county health officers serving approximately 53 per cent of our rural population. The remaining 61 counties in North Carolina have health officers, but they are not employed on a full-time basis and do very little public health work as a rule. Several cities in the state maintain health departments independently of the counties.

The State Board of Health

The organization and functions of the State Board of Health are as follows:

ORGANIZATION

Secretary State Board of Health and State Health Officer.
Director Public Health Education.
Superintendent State Sanatorium and Chief Bureau of Tuberculosis.
Director State Laboratory of Hygiene.
Deputy State Registrar.
Chief of Bureau of Medical Inspection of Schools.
Chief of Bureau of Engineering and Inspection.
Chief of Bureau of Venereal Diseases.
Chief of Bureau of Public Health Nursing and Infant Hygiene.
Director of County Health Work.
Chief of Bureau of Epidemiology.
County Health Officers.
Sanitary Inspectors.
Public Health Nurses.
Clinic Surgeons and Dentists.
Clinic Nurses.
Public School Teachers.
Midwives.

FUNCTIONS

To maintain an office at the capital.
To look after the general health interests of the people and be health adviser to the government.
To advise the government in regard to location, sanitary construction, and management of state institutions.
To inspect such institutions, report conditions, and advise trustees.
To have direct charge in case of certain epidemics.
To make diagnostic examinations of certain bacilli.
To make periodic analysis of water from sources of public supply and from mineral springs whose water is offered for sale.
To make microscopic examinations for tuberculosis and certain

other diseases.
To manufacture and distribute typhoid, diphtheria, and other vaccines.
To maintain a bureau of tuberculosis.
To enforce the sanitation laws of the state.
To keep a record of vital statistics and to enforce the vital statistics law.
To enforce laws for control of contagious diseases and for the prevention of blindness in infants.
To administer the law for the prevention of venereal disease.
To superintend public health nursing in the state and to give information in the pre- and post-natal care of infants.
To supervise county health officers in counties coöperating with the State Board of Health.
To direct the physical examination of the school children of the state and provide clinics for the treatment of diseased tonsils and teeth.
To publish a monthly bulletin and other educational literature and to make such reports as may be required by law.

An excellent account of the work of the State Board of Health appears in *The Health Bulletin* of October, 1928.[3] The following summary is based on this official analysis:

(1) The State Laboratory of Hygiene makes examinations to assist the physicians of the state in the diagnosis and treatment of their patients; periodically examines samples from all public water supplies; distributes typhoid vaccine for the prevention of typhoid fever; distributes pertussis vaccine for the prevention and treatment of whooping cough; manufactures and distributes smallpox vaccine for the prevention of smallpox; distributes toxin-antitoxin for the prevention of diphtheria and antitoxin for the treatment of diphtheria; makes and distributes Pasteur anti-rabic treatments and tetanus antitoxin for the prevention of this dread disease; distributes neoarsphenamine for the treatment of syphillis; altogether, in water analysis, diagnostic examinations, and in sera and vaccines supplied, the laboratory performs a public service that at ordinary commercial rates would exceed $1,250,000 annually.

(2) The division of vital statistics is charged with the vital bookkeeping of the state, an accounting in terms of life and death of the state's population. Its objective is to secure a permanent record of the more important facts concerning the birth and death of every citizen of the state, and from such records to prepare card indices and tabular classifications in such manner as to make this informa-

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[3] R. B. Wilson, "Health—The State's Greatest Asset."

tion readily available.

(3) Through its division of epidemiology the Board endeavors to control the spread of contagious and infectious diseases. It supervises the quarantine of approximately 50,000 such cases each year; makes epidemiological investigations to ascertain the source of infection in such diseases as typhoid fever and diphtheria; conducts with the assistance of local physicians mass vaccination campaigns for the prevention of typhoid and diphtheria; supervises a malaria control program in a number of eastern counties; and supervises a number of impounded water projects.

(4) The 39 county health departments through the division of County Health Work are given supervision and advice, together with financial assistance.

(5) In the division of Medical Inspection of Schools, a field staff of eight nurses, eight dentists, and one supervising dentist is maintained. About 90,000 school children are being examined by the nurses in those counties not having local health departments. Personal notes are sent to parents advising of such defects as may be found and urging that the child be given the medical care in order that correction may be made.

As a follow-up of this work, the Board conducts during the summer months clinics for operative treatment of children of school age suffering with diseased tonsils and adenoids. About 2,000 children are now being treated each year in these summer clinics.

About 36,000 school children are receiving dental treatment. The school dentists doing this work are provided with portable outfits and conduct the dental clinics in the school buildings.

A conservative estimate of the cost value of the work done in the tonsil and dental clinics each year is $500,000.

(6) The division of Sanitary Engineering and Inspection is charged with manifold duties, all of which intimately affect the public health.

Primarily this division supervises the construction and maintenance of all public water supply and sewerage systems; enforces the state sanitary privy law; inspects toilets and cafés, jails and convict camps; aids in protecting the milk supply of all municipalities which have adopted the standard milk ordinance; supervises sanitation in the shellfish growing areas of the state; gives engineering services in water supply and sewerage disposal installations for consolidated schools; and makes studies of stream pollution.

(7) The division of Maternity and Infancy is primarily charged with the responsibility of reducing the infant and maternal death rate. It has the supervision of the 6,500 midwives of the state; gives

a correspondence course in prenatal care to expectant mothers; and sends out special literature on infant care and diet. The field nurses personally visit mothers and advise with them on the care of themselves and their babies.

(8) The work of the division of Health Education consists of: (a) preparing copy for the monthly Health Bulletin; (b) preparing special pamphlets on particular health subjects; (c) the preparation of special articles on health subjects for the press of the state; and (d) visual education through the means of a mobile motion picture unit.

(9) The Life Extension division was organized in January, 1928, and is functioning with two objectives: (a) to acquaint those physicians residing in the rural sections of the state and practising without the aid of hospitals and laboratories, with the technique of making physical examinations of the apparently well; (2) to assist the medical profession in impressing upon the citizenship of the state the fact that through competent physical examinations certain degenerative diseases may be discovered in their incipiency and alleviated or cured.

The enormous work of the State Health Department, only a brief outline of which is given above, is accomplished on an annual appropriation by the General Assembly of $441,400 for the 1927-1929 biennium.[4] The appropriations made by the counties and cities approximate $600,000 annually, so that all told there is spent within the state a little more than a million dollars annually for the protection and promotion of public health. This amounts to approximately one-third of a dollar per inhabitant, which seems a very small expenditure for a state that almost leads the nation in public health work.

County Health Work

The United States Public Health Service is strongly of the opinion that the proper foundation for rural health service is the county health department under the direction of the qualified whole-time county health officer. It becomes more and more evident to those with practical experience in the public health field that agencies concerned with the promotion of specialized health activities, such as typhoid fever prevention, hookworm control, tuberculosis prevention, malaria control, venereal disease prevention, or child and maternity hygiene, can perform most effectively and economically by dovetailing their specific activities with and making them a part of a well-balanced, comprehensive program of local official health service under the immediate direction of qualified, whole-time local health officers.

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[4] North Carolina ranks sixth in amount appropriated by the state for public health work. The states that appropriate more are: Pennsylvania, New York, Illinois, Ohio, and Massachusetts, all more populous and far richer than North Carolina.

Approximately one-eighth of all the counties in the United States with whole-time health officers are in North Carolina.[5] In all cases except where a city has its separate health organization the county health service also includes the urban population. This serves the people in a great variety of ways. The officers are charged generally with looking after hygienic conditions in the respective counties. The main job of a county health department is to keep the people well. If the first person with a contagious disease can be isolated, an epidemic may be averted, untold suffering prevented, and likely many lives saved. Three contagious diseases, typhoid fever, diphtheria, and smallpox, can be prevented by vaccinations.

Venereal diseases are far more prevalent than is generally recognized, and treating the nearly 3,000 cases which are annually reported to these officers takes a large part of their time. Looking after the tubercular is still one of the biggest duties of the public health officers, and although the death rate from tuberculosis has been cut half in two in North Carolina during the last 12 years, the deaths from this disease are exceeded only by those from heart disease and pneumonia.

Other activities of the county health authorities are instructing expectant mothers, instructing mothers about the care of babies, giving courses to midwives, and in other ways caring for the lives of mothers and infants. Ignorance is largely responsible for the approximately 7,000 children who annually in this state are either born dead or die during the first year after birth. A well informed and well cared for mother seldom loses her child or her own life for that matter. The bulk of infant mortality occurs in the homes of people who are ignorant and whose children do not have proper medical attention.

Another great service is rendered through the examination of thousands of school children and the treatment, where found, of defective tonsils, adenoids, teeth, eyes, and other ills. The health officers look after sanitary conditions in county homes, jails, and convict camps. They give examinations to prisoners in jail, physical examination for certificate to obtain marriage license, physical examinations to teachers; they coöperate with the public welfare officers, prosecuting the violators of state and local health laws, and in many other ways they are constantly rendering public service.

HEALTH CONDITIONS

It is thus seen that in the field of public health work North Carolina holds a very creditable position. The state has made remarkable progress in improving health conditions and in reducing the death rates. The vital statistics records show that North Carolina has made a much greater degree of improvement in the health of its people since 1900 than has the country as a whole. Our death rate, once above the national average, is now exactly the average for the registration states, in spite of the high death rate among Negroes. Our white death rate is considerably lower than the average for the registration area. Some indication of the progress the state has made may be seen from the following table, which shows the death rate per 100,000 population from typhoid and tuberculosis by years from 1914 to 1925 inclusive.

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[5] *News Letter*, vol. XIII, no. 29.

Year	Typhoid Death Rate	Tuberculosis Death Rate
1914	35.8	139.3
1915	31.3	156.4
1916	29.1	146.3
1917	30.2	141.5
1918	22.2	137.5
1919	17.0	120.3
1920	12.5	113.6
1921	11.7	101.0
1922	11.2	97.5
1923	9.9	94.7
1924	9.9	99.1
1925	9.8	89.0

Our Weak Spots. The three weak spots in our health situation at the present time are: (1) high infant and maternal death rates, (2) too much reliance upon midwives, and (3) inadequate hospital facilities. Our high Negro death rate is a matter that should give us great concern, but the rate is not unlike those of other states.

For nine successive years North Carolina has led the states of the registration area in birth rates, which are approximately one-third higher than the average for the registration area. But with this high birth rate goes a high infant death rate.

Data released by the United States Public Health Service[6] show that of the thirty-seven states in the registration area in 1927, only three had higher infant death rates than North Carolina. The state *Health Bulletin,* in commenting on this fact, says:

> Speaking from the standpoint of public health, the serious import of the birth rate is the fact that being a baby still constitutes the most hazardous occupation in the state. A further and still more significant cause for worry and work is the fact that beginning with the month of

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[6] *News Letter,* vol. XIV, no. 5.

May the death rate of babies mounts higher and higher throughout the summer, the curve coming on back down about October. In other words, the death rate of babies follows the house fly. On the other hand, the general death rate including all the adult population beginning with the month of May curves down lower and lower, beginning to climb back up about October or November. In short the summer months are the healthiest and safest period of the year for all the population except the babies.[7]

During the year 1927 there were 83,334 births, exclusive of still-births, in North Carolina, and 6,516 deaths of infants under one year of age. This gives us an infant death rate of 78.2 compared with an average rate of 64.3 per one thousand births for the registration area.

The low rank of North Carolina is due in part to our Negro population, for the Negro infant death rate in this state is about twice that of the white. This is not offered as an excuse, but as an explanation. We know where the main problem is to be found. Yet it is not the whole explanation, or our white infant death rate would not be above that for the registration area.

A study of infant deaths by years reveals the fact that the number and rate are fairly constant in North Carolina. In 1925 there were 6,591 infant deaths, and the rate was 78.7 per one thousand births. Infant deaths in North Carolina each year exceed the total population of some of our counties. The rate is appalling. The cause is largely ignorance of the proper care of infants.

North Carolina cities, too, as a group lead the United States in infant death rates. Only 42 out of 650 cities reported in the United States have infant death rates above 100 per 1,000 births. Eight of these are in North Carolina. Outside of North Carolina there are only 5 cities with infant death rates above 120 deaths per 1,000 births, while North Carolina alone has 4 such cities! There are 14 cities in the state whose infant death rates are reported. In every case the rate is above the average for the state, in most cases far above. New Bern has the highest infant death rate for 1927 of any city in the United States! Wilson is fourth, Wilmington is sixth, and Winston-Salem is ninth. The following table[8] gives the infant death rates per 1,000 births for North Carolina cities as officially reported.

Maternal Mortality. Not only is the infant death rate high in North Carolina, but the maternal mortality rate also is high—8.2 per 1,000 live births in 1925. During that year 690 mothers were reported to have died from puerperal causes. Six counties reported no deaths of mothers resulting from childbirth. The rate was highest in Jones County with 20.2 deaths of mothers per 1,000 live births. In 33 counties the maternal mortality rate was above 10 per 1,000 live births. Counties with high infant death rates seem to have high maternal mortality rates, but there are many exceptions.

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[7] *News Letter,* vol. XIV, no. 5.

[8] *Ibid.*

Rank	City	Infant Death Rate
1	High Point	78.5
2	Salisbury	86.4
3	Charlotte	88.4
4	Goldsboro	94.2
5	Raleigh	94.3
6	Durham	96.9
7	Greensboro	101.7
8	Gastonia	102.6
9	Rocky Mount	107.5
10	Asheville	111.7
11	Winston-Salem	121.8
12	Wilmington	127.7
13	Wilson	136.6
14	New Bern	199.2

North Carolina makes therefore an unfavorable showing in maternal mortality when compared with other states. Out of 30 states reported in 1923 only 4 had rates higher than North Carolina. There is no foreign country for which data are reported whose maternal mortality rate is anywhere near as high as North Carolina's.

MIDWIVES

One of the chief explanations of this state of affairs is the prevalence of midwives. In 1925, according to the State Bureau of Vital Statistics,[9] 14.09 per cent of all white births and 70.55 per cent of all Negro births in North Carolina were attended by midwives. All told, nearly 26,000 births or about one-third of all births in North Carolina, white and black, were attended by midwives in 1925.

The geographic distribution of the practice of midwifery makes an interesting study. The proportion of white children delivered by midwives in the Piedmont country is rather small. The ratios are high in the counties east of the fall line, or the Coastal Plain, and highest in the Tidewater and Mountain counties, with the exception of a half-dozen urban counties. At least four-fifths of all Negro births in the eastern half of the state are attended by midwives. The ratio is considerably lower in the Piedmont counties as a rule, and lowest in the Carolina Highlands. Only three counties in the eastern half of North Carolina have as many as one-third of the Negro births at-

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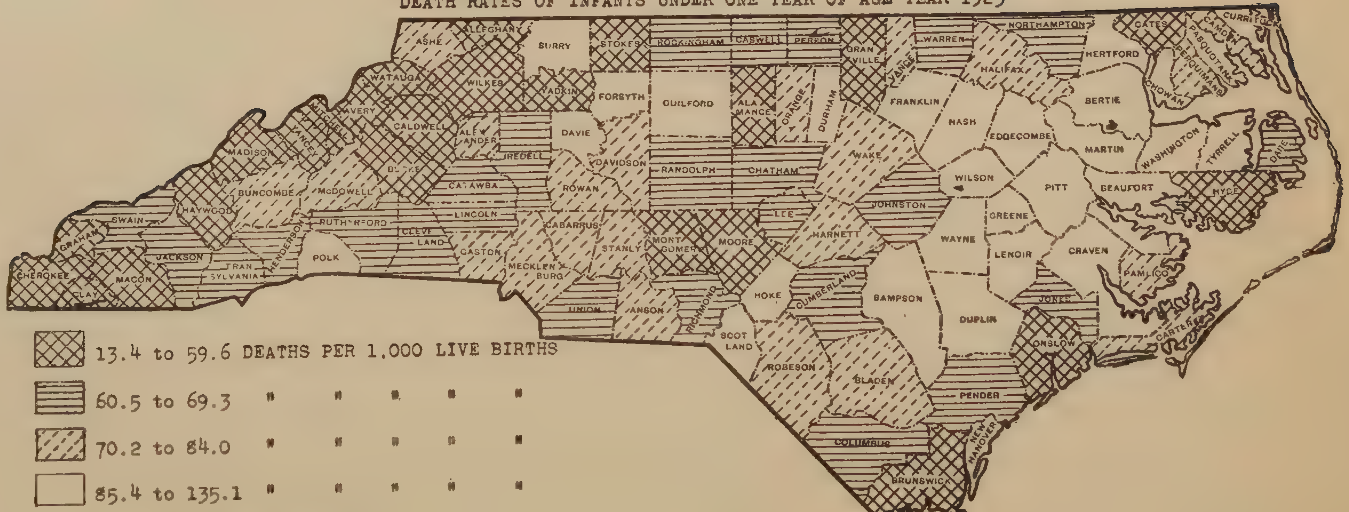
[9] *News Letter,* vol. XIII, no. 24.

NORTH CAROLINA

DEATH RATES OF INFANTS UNDER ONE YEAR OF AGE YEAR 1925


▩ 13.4 to 59.6 DEATHS PER 1,000 LIVE BIRTHS
▤ 60.5 to 69.3 " " " " "
▨ 70.2 to 84.0 " " " " "
☐ 85.4 to 135.1 " " " " "
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ALLEGHANY
SURRY
STOKES
ROCKINGHAM
CASWELL
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GRANVILLE
VANCE
WARREN
NORTHAMPTON
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PERQUIMANS
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HERTFORD
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YADKIN
FORSYTH
GUILFORD
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MARTIN
WASHINGTON
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ALEXANDER
IREDELL
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BEAUFORT
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JACKSON
TRANSYLVANIA
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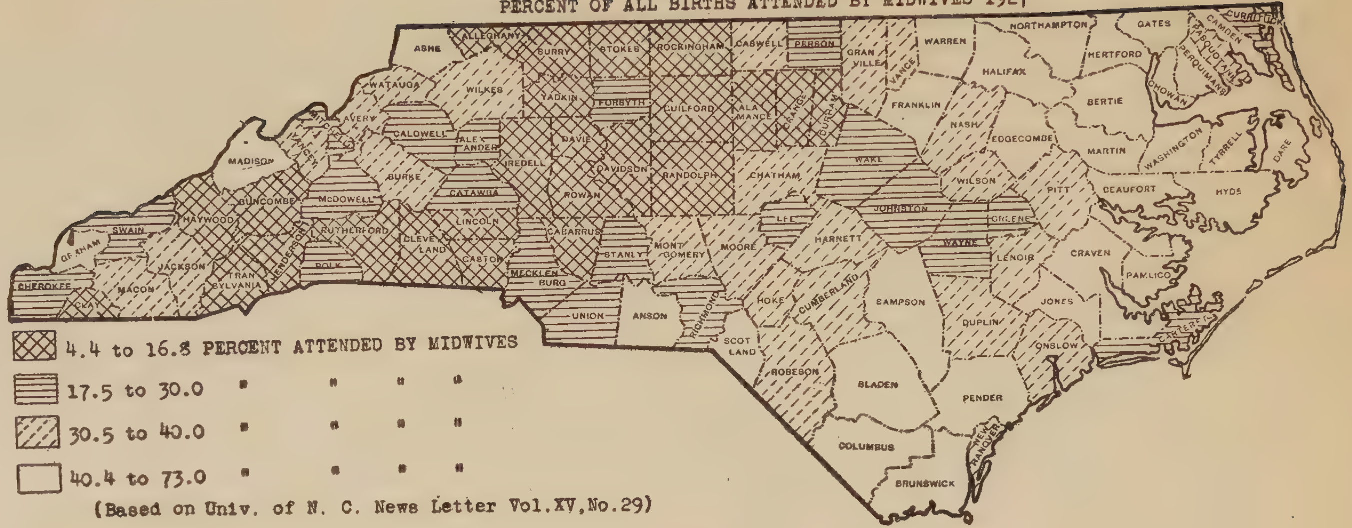
MONTGOMERY
MOORE
HARNETT
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
SCOTLAND
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

(Based on Table No.48)

PERCENT OF ALL BIRTHS ATTENDED BY MIDWIVES 1927


▩ 4.4 to 16.8 PERCENT ATTENDED BY MIDWIVES
▤ 17.5 to 30.0 " " " "
▨ 30.5 to 40.0 " " " "
☐ 40.4 to 73.0 " " " "
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CURRITUCK
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HERTFORD
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GUILFORD
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ORANGE
DURHAM
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
AVERY
MITCHELL
YANCEY
MADISON
CALDWELL
ALEXANDER
DAVIE
IREDELL
DAVIDSON
RANDOLPH
CHATHAM
WAKE
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CUMBERLAND
HOKE
RICHMOND
SCOTLAND
ANSON
UNION
ROBESON
BLADEN
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK

(Based on Univ. of N. C. News Letter Vol.XV,No.29) tended by doctors.

North Carolina, with 6,500 midwives (approximately one-seventh of the total number), leads the United States in number. Just why they are considered an explanation of our high infant and maternal death rates may be seen from the following quotation from the North Carolina monthly *Health Bulletin*:

> The midwife of Robeson County is rather typical of the midwife of the South. Out of 128 midwives registered, over 100 are colored, and only 38 can read and write; the average age of each is 56 years, and the average number of confinements attended by each midwife annually is nine. Wassermanns were taken on 63 midwives, and 13 showed positive.
>
> These midwives are, except in rare instances, ignorant, untrained, incompetent women, and some of the results of their obstetric incompetence are unnecessary deaths and blindness of infants, and avoidable invalidism, suffering, and deaths of mothers.[10]

North Carolina is a fertile field for the midwife, due to the fact that we have only one physician for every 1,210 inhabitants, being outranked in this particular by forty-four states.[11]

HOSPITAL FACILITIES

The state makes a poor showing in hospital facilities. According to a recent report of the Hospitals Section of the Duke Endowment,[12] North Carolina is the fortieth state in the Union in hospital facilities, having at the close of 1925 one hospital bed for every 517 inhabitants as compared with a national average of one hospital bed for every 291 persons.

Forty-four counties in the state have no general hospitals at all, and sixteen others have less than one bed per 1,000 population. In only five counties—Cumberland, Durham, New Hanover, Mecklenburg, and Buncombe—are there as many as 4 beds per 1,000 population. Seventeen other counties have at least 2 beds for each 1,000 people.

Altogether there are 102 general hospitals in the state with a capacity for 3,753 white patients and 949 colored patients. Of these hospitals 72 are private and 30 are public. The public hospitals are classified as follows: 14 community; 11 religious; 2 county; 3 municipal. The two county hospitals reported are in Rutherford and Vance counties. Since the report was made, however, county hospitals have been established in Haywood and Johnston counties. The three municipal hospitals are located at Raleigh, Winston-Salem, and Shelby.

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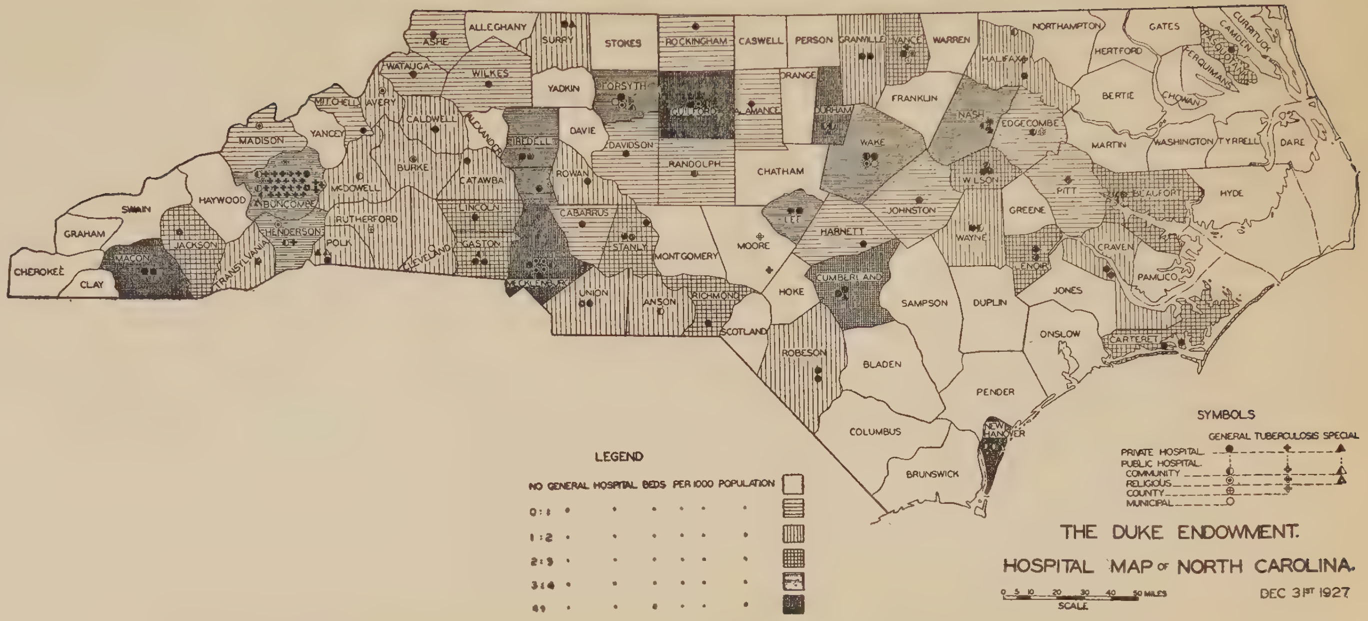
[10] *News Letter,* vol. XIII, no. 24.

[11] *Ibid.*

[12] For 1926.

HOSPITAL FACILITIES IN NORTH CAROLINA AT END OF 1927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WASHINGTON
TYRRELL
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MITCHELL
AVERY
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ALEXANDER
IREDELL
DAVIE
DAVIDSON
RANDOLPH
CHATHAM
WAKE
MADISON
YANCEY
BURKE
CATAWBA
ROWAN
WILSON
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BEAUFORT
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HAYWOOD
BUNCOMBE
McDOWELL
RUTHERFORD
LINCOLN
CABARRUS
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HARNETT
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GRAHAM
JACKSON
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MONTGOMERY
MOORE
WAYNE
CRAVEN
CHEROKEE
CLAY
MACON
MECKLENBURG
UNION
ANSON
RICHMOND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
LENOIR
JONES
PAMLICO
SCOTLAND
ROBESON
BLADEN
ONSLOW
CARTERET
PENDER
NEW HANOVER
COLUMBUS
BRUNSWICK
LEGEND
NO GENERAL HOSPITAL BEDS PER 1000 POPULATION
0:1
1:2
2:3
3:4
4+
SYMBOLS
GENERAL TUBERCULOSIS SPECIAL
PRIVATE HOSPITAL
PUBLIC HOSPITAL
COMMUNITY
RELIGIOUS
COUNTY
MUNICIPAL
THE DUKE ENDOWMENT.
HOSPITAL MAP OF NORTH CAROLINA.
DEC 31ST 1927
0 5 10 20 30 40 50 MILES
SCALE

In addition to the 102 general hospitals in the state, there are 36 tuberculosis sanatoria, 10 of which are public, and 14 special hospitals, 7 of which are public institutions—that is, supported wholly or in part by the public. This number includes the state tubercular sanatorium at Sanatorium and the state orthopedic hospital at Gastonia. The 9 counties having tuberculosis sanatoria are Forsyth, Buncombe, Guilford, Mecklenburg, New Hanover, Edgecombe, Halifax, Henderson, and Moore.

The Duke Endowment. North Carolina is not destined long to remain a state with poor hospital facilities. Thanks to the Duke Endowment of $40,000,000, 32 per cent of the income from which is to be devoted to the maintenance and construction of hospitals in North and South Carolina, these states will soon rank among the best in hospital facilities. The following explains how this fund will be expended:

> Under the provisions of the Trust, the Trustees may give a sum not exceeding one dollar for every day a patient who is unable to pay is treated free of charge in a hospital not operated for private gain. It is further provided that the Trustees of the Endowment may expend any surplus of funds, over the expenditure needed for the maintenance of charity patients, for the construction and equipment of hospitals. These two provisions, the one for the maintenance and the other for the construction and equipment of hospitals, are restricted in their application to the two states, North Carolina and South Carolina, until the hospital needs of the two states are adequately supplied. . . .[13]

During the year 1925 the Duke Endowment contributed $106,165 to the maintenance of charity patients in North Carolina hospitals. The annual expenditure will be far larger than this as the hospital section of the Duke Endowment develops. At least a half million dollars annually should be available from the Endowment for this purpose.

Ranking second only to Ohio in state and county public health work, and this magnificent work reinforced by the generous Duke Endowment, North Carolina bids fair to become a healthy state, well sanitated, and well provided with hospital facilities.

REFERENCES

Annual Reports of the Duke Endowment, Hospital Section, Charlotte, N. C., 1925, 1926, 1927.

Annual Reports of the State Board of Health, Raleigh, 1888 to 1928.

Annual Reports of the Vital Statistics Bureau, State Board of Health, Raleigh, 1914 to 1928.

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[13] Report for 1926.

Health Bulletin, The, Published monthly by the State Board of Health, Raleigh. See especially issue of Oct., 1928.

Mortality Statistics. Issued annually by the Census Bureau, Department of Commerce, Washington.

News Letter, vol. XIII, nos. 24, 29; vol. XIV, no. 5.

CHAPTER XVIII

PUBLIC WELFARE IN NORTH CAROLINA

The North Carolina system of public welfare, based on the county as the administrative unit, is particularly well adapted to the needs of a rural state. At the same time it is flexible enough to permit the development of such specialized agencies as are required by the problems which develop in urban and industrial centers.

The outstanding feature of the North Carolina plan is that every county in the state has public welfare machinery of its own—a public welfare board, a county juvenile court judge, and a whole-time, part-time, or ex-officio superintendent of public welfare.

Some Backgrounds of the Present Public Welfare System in North Carolina

The predecessor of the present public welfare system, the North Carolina Board of Public Charities, functioned rather effectively in its limited way for a half-dozen years after its establishment in 1868, after which time it was inactive until Captain C. B. Denson became its secretary in 1889. Later his daughter, Miss Daisy Denson, filled this secretaryship quite efficiently.

In the meantime a group of interested and influential citizens, realizing that a more effective organization for public welfare was needed, had been working in behalf of the plan which materialized in 1917, when the General Assembly passed the act which created the North Carolina State Board of Charities and Public Welfare. A. W. McAlister of Greensboro, whose work for this cause was paramount, won the title of "the father of public welfare in North Carolina."

It was not until the mandatory act was passed by the legislature in 1919, requiring the organization of every county in the state for public welfare, that the system made possible by the enabling legislature of 1917 became effective. This act specified the appointment of a public welfare board in every county and the employment of a superintendent of public welfare in counties with a population of 25,000 (later amended to read 32,000). In counties with less than 32,000 the election of a superintendent of public welfare is optional, while in counties where the commissioners fail to elect, the superintendent of schools is required to serve as ex-officio superintendent of public welfare.

Just as the state-wide public welfare act provided for the organization of every county for public welfare, the state-wide juvenile court act of 1919 created a juvenile court in every county with the clerk of the superior court as judge.

The Structure of North Carolina's Machinery for Public Welfare

The North Carolina plan of public welfare is based upon a state organization which has powers and duties of supervision and oversight of all penal and corrective institutions and agencies in the state, and a county unit organization for the administration of public welfare within the local communities throughout the state. The inter-relation and coördination of the various state and county departments provide an effective approach for the care of the present defectives, dependents, and delinquents in North Carolina, and at the same time, through a constructive preventive program, for the gradual diminution of problems arising from illiteracy, lack of medical care of school children, careless administration of the poor fund, and the like.

The State Board of Charities and Public Welfare is made up of seven members, appointed by the governor and confirmed by the legislature. The members of this board, two of whose terms expire every two years, serve without pay. The Commissioner of Public Welfare is appointed by this board. The activities of the state board are grouped about six divisions, besides the department of publicity, one of which—the division of school attendance—has been in operation only since June, 1928, and another—the division of work among Negroes—since 1925. Both of these last two divisions have been made possible by grants from the Laura Spelman Rockefeller Memorial. The divisions and their specific activities are shown on an accompanying chart.[1] A staff of trained workers is responsible for carrying out the various activities of the board.

The structure of the North Carolina county organization for public welfare is similar to that of the state organization. For example, the county superintendent of public welfare occupies a position in the county unit which corresponds to that of the Commissioner of Public Welfare in the state; and so on. It should be pointed out, however, that the county superintendent of public welfare is not the executive secretary of the county board of public welfare, but is rather responsible to the county commissioners and the county board of education by which he is elected. The county board of public welfare is only advisory to the superintendent of public welfare. An accompanying chart

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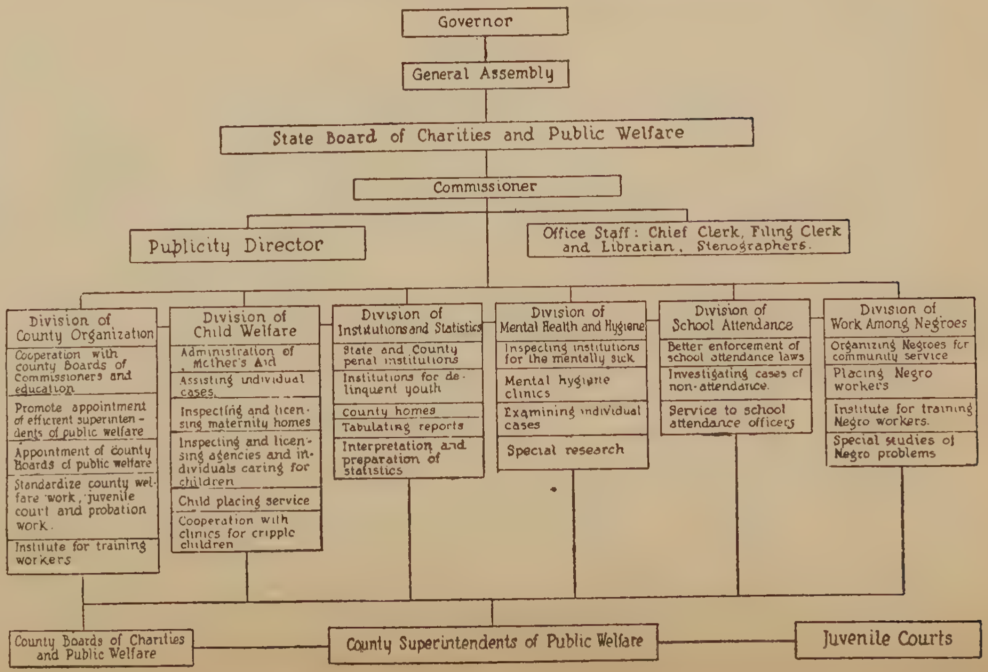
[1] Chart entitled State Board of Charities and Public Welfare.

STATE BOARD OF CHARITIES AND PUBLIC WELFARE

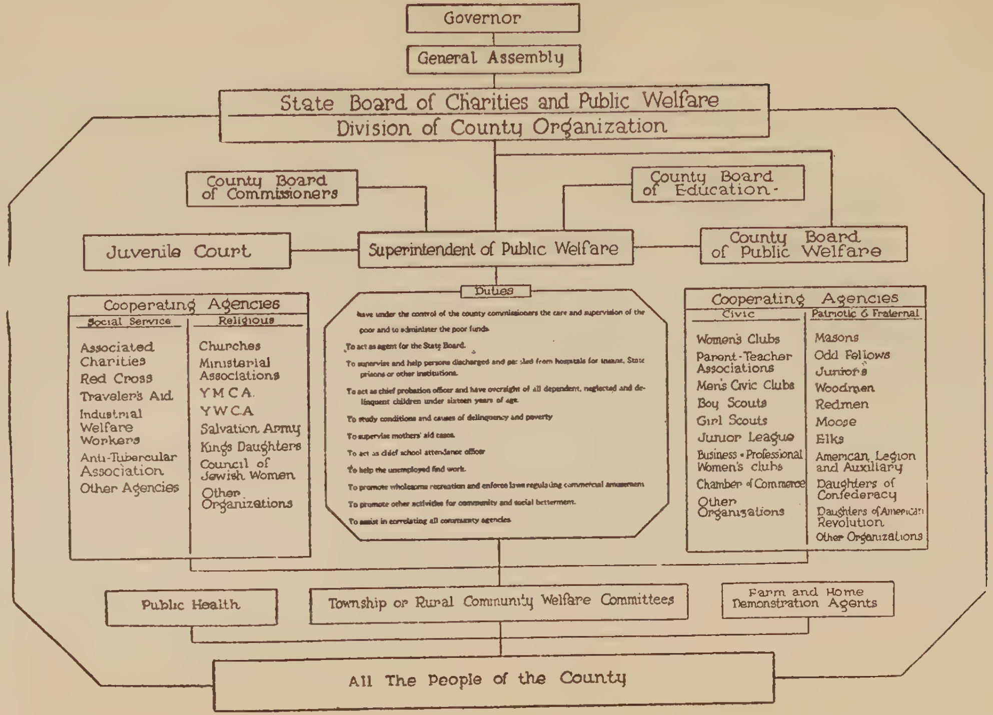
Constitutional Mandate

"Beneficent provision for the poor, the unfortunate and orphan, being one of the first duties of a civilized and Christian State, the General Assembly shall, at its first session, appoint and define the duties of a Board of Public Charities, to whom it shall be entrusted the supervision of all charitable and penal State institutions, and who shall annually report to the Governor upon their condition with suggestions for improvement."

Law C. S. 5004-5013


Governor
General Assembly
State Board of Charities and Public Welfare
Commissioner
Publicity Director
Office Staff: Chief Clerk, Filing Clerk and Librarian, Stenographers.
Division of County Organization
Cooperation with county Boards of Commissioners and education
Promote appointment of efficient superintendents of public welfare
Appointment of county Boards of public welfare
Standardize county welfare work, juvenile court and probation work.
Institute for training workers
Division of Child Welfare
Administration of Mother's Aid
Assisting individual cases.
Inspecting and licensing maternity homes
Inspecting and licensing agencies and individuals caring for children
Child placing service
Cooperation with clinics for cripple children
Division of Institutions and Statistics
State and County penal institutions
Institutions for delinquent youth
County homes
Tabulating reports
Interpretation and preparation of statistics
Division of Mental Health and Hygiene
Inspecting institutions for the mentally sick
Mental hygiene clinics
Examining individual cases
Special research
Division of School Attendance
Better enforcement of school attendance laws
Investigating cases of non-attendance.
Service to school attendance officers
Division of Work Among Negroes
Organizing Negroes for community service
Placing Negro workers
Institute for training Negro workers.
Special studies of Negro problems
County Boards of Charities and Public Welfare
County Superintendents of Public Welfare
Juvenile Courts

NORTH CAROLINA COUNTY PLAN OF PUBLIC WELFARE SHOWING COOPERATION OF PUBLIC AND PRIVATE AGENCIES IN A COUNTY WIDE PROGRAM


Governor
General Assembly
State Board of Charities and Public Welfare
Division of County Organization
County Board of Commissioners
County Board of Education
Juvenile Court
Superintendent of Public Welfare
County Board of Public Welfare
Duties
Cooperating Agencies
Social Service
Associated Charities
Red Cross
Traveler's Aid
Industrial Welfare Workers
Anti-Tubercular Association
Other Agencies
Religious
Churches
Ministerial Associations
Y M C A.
Y W C A
Salvation Army
Kings Daughters
Council of Jewish Women
Other Organizations
Cooperating Agencies
Civic
Women's Clubs
Parent-Teacher Associations
Men's Civic Clubs
Boy Scouts
Girl Scouts
Junior League
Business & Professional Women's clubs
Chamber of Commerce
Other Organizations
Patriotic & Fraternal
Masons
Odd Fellows
Juniors
Woodmen
Redmen
Moose
Elks
American Legion and Auxiliary
Daughters of Confederacy
Daughters of American Revolution
Other Organizations
Public Health
Township or Rural Community Welfare Committees
Farm and Home Demonstration Agents
All The People of the County

Have under the control of the county commissioners the care and supervision of the poor and to administer the poor funds.

To act as agent for the State Board.

To supervise and help persons discharged and paroled from hospitals for insane, State prisons or other institutions.

To act as chief probation officer and have oversight of all dependent, neglected and delinquent children under sixteen years of age.

To study conditions and causes of delinquency and poverty

To supervise mothers' aid cases.

To act as chief school attendance officer

To help the unemployed find work.

To promote wholesome recreation and enforce laws regulating commercial amusements

To promote other activities for community and social betterment.

To assist in correlating all community agencies.

outlines the county plan of public welfare.[2]

The various phases of the county work serve to define the field of public welfare in the county rather than to portray the range of accomplishments in any one county. In one county the welfare organization may specialize in relief work, or school attendance, general child welfare work, or a combination of activities, depending upon local conditions and the interests of the board members and the superintendent of public welfare.

In June, 1928, forty-nine counties had whole-time superintendents, six had part-time superintendents, while county superintendents of schools served in the remaining forty-five counties. In counties where there is no full-time superintendent of public welfare the work of the board is almost entirely contingent upon the interest, intelligence, and aggressiveness of the individual board members. As a general rule, the county unit of administration has been effective only where a full-time or part-time superintendent has been elected. There are notable exceptions, however.

The appointment of township or rural welfare committees within a county shows a tendency for the county board to recognize the importance of the participation of the people in all matters pertaining to the local conditions. Just as the state board needs the coöperation of the county boards to do its own work, so the county boards are beginning to realize the need for township or community committees. This approach puts a premium upon local social self-sufficiency.

Juvenile Courts. From the very outset the state board was faced with the problems of juvenile delinquency. The state-wide juvenile court act of 1919 required the establishment of a juvenile court in every county, with the clerk of the superior court as judge of this court. Although the juvenile courts have not been efficient in all counties, thousands of delinquent or near-delinquent children, who without the court would have been ignored or treated as adult offenders, have been aided in a constructive manner.

Summer Institutes. The county commissioners and board of education have the right to select, subject to the veto power of the state board, whom they will for superintendent. They usually choose a local citizen. There was and still is a dearth of trained social workers in the state. To meet this situation, the School of Public Welfare at the University of North Carolina, in coöperation with the State Board of Charities and Public Welfare, conducts an Institute for Public Welfare each summer for superintendents of public welfare, juvenile court judges, probation officers, community workers, county welfare board members, and any other persons who are interested in attending these

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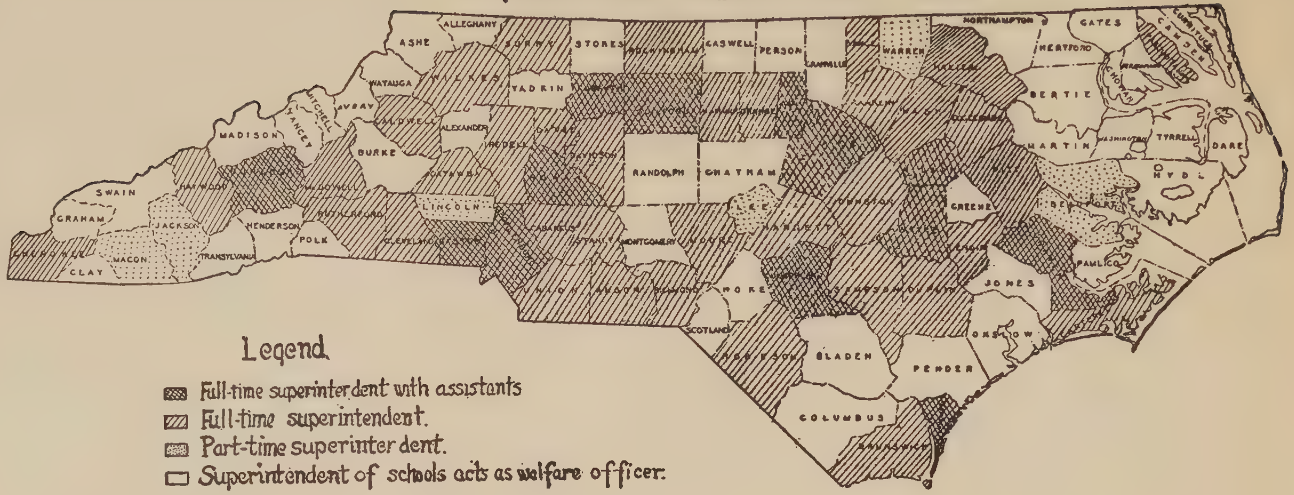
[2] Chart entitled North Carolina County Plan of Public Welfare.

COUNTIES EMPLOYING WELFARE OFFICERS, 1928
(From 1928 Report Com. Publ. Welfare)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WASHINGTON
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WILKES
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MONTGOMERY
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TRANSYLVANIA
POLK
CLEVELAND
GASTON
UNION
ANSON
RICHMOND
HOKE
SAMPSON
DUPLIN
JONES
PAMLICO
CLAY
SCOTLAND
ROBESON
BLADEN
ONSLOW
PENDER
COLUMBUS
BRUNSWICK
Legend
▩ Full-time superintendent with assistants
▨ Full-time superintendent.
▦ Part-time superintendent.
☐ Superintendent of schools acts as welfare officer.

Institutes. Each year additional interest has been manifested in them. A Negro Public Welfare Institute is conducted annually at one of the Negro colleges in the state.

The machinery for welfare work in North Carolina, therefore, is made up of a state organization, a county organization, including a juvenile court, and annual Institutes for Public Welfare for the guidance of local and state welfare workers.

North Carolina Welfare Machinery at Work

The state and county welfare organizations, though more or less limited to service activities at the beginnings of their work under the acts of 1917 and 1919, are from year to year putting more emphasis upon preventive programs. Not the least of the duties of the state and county welfare officials is that of research into conditions which cause poverty, delinquency, and other problems involving welfare needs; and no sooner are the conditions appreciated than state and county welfare officers turn their attention to prevention, while continuing their service activities. Obviously, preventive work is equally as important as service work, but the results of salvaging activities can be demonstrated much more easily than those of constructive community programs. Consequently there has been a demand for results, particularly by those least acquainted with the true function of welfare work.

It is well that the institutions caring for dependent and delinquent children have been limited in size, for many of the superintendents when first beginning their work know only to send their charges to some private or state institution. But with this size limitation the welfare officers have had to make a fuller utilization of local community resources.

Outstanding preventive work has been done in connection with the juvenile courts, the administration of mothers' aid, school attendance, and the supervision of recreational and amusement activities. An important recent development has been the addition of the division of school attendance and the employment of a director to coöperate with welfare officers throughout the state for the more effective enforcement of the school attendance law.

A brief account follows of the work of the different divisions of the State Department of Charities and Public Welfare:

Division of Child Welfare. This division deals with children needing special care and attention, such as those handicapped physically, mentally, socially, and financially.

The state provides institutions for the blind, deaf, and dumb children of both races. The crippled children are served by the North

Carolina Orthopedic Hospital, Gastonia, which is a state institution. Monthly clinics for crippled children are conducted at this hospital, which is in the western part of the state, and at Goldsboro in eastern North Carolina. A limited number of white feeble-minded children are provided for at the Caswell Training School. North Carolina has no state institution for Negro feeble-minded children. This is at present one of the most urgent needs of the state.

Illegitimate children are under the care of the division of child welfare. North Carolina's four maternity homes are filling a great human need, with a capacity of 89 patients in the four places—Crittenton Industrial Home at Charlotte, Greensboro Rest Home at Greensboro, the Salvation Army Maternity Home and Hospital at Wilmington, and Faith Cottage at Asheville.

Mothers' aid seems to be the most practical approach to the problem of financially handicapped children. From June, 1926, to June, 1928, 2,168 children in 542 homes were kept with their mothers by this means. It has been shown that the state can maintain a child more cheaply by supplementing the income of the mother than in any other way. Further, the health and school records of children so cared for have been very satisfactory. Total disbursements in mothers' aid cases in 1928 amounted to $81,395, half of the fund coming from the state and half from the counties. Three-fourths of the counties participate in this work, with new ones added each year.

The director of the division of child welfare feels that boarding home care for problem children should be developed in North Carolina to meet the needs of children requiring temporary care, specific types of guidance, and those whose problems are of such nature that close observation is needed for proper disposition of them.

Division of Institutions. The division of institutions has duties of inspection and the presentation and interpretation of statistics collected from the various institutions of the state. This division inspects at least once each year all child-caring institutions (including 22 orphanages housing 4,000 children), county homes, and penal institutions in the state. Institutions for juvenile delinquents and the training school for feeble-minded children are likewise open to such inspection. Approximately 1,600 juvenile delinquents and 600 feeble-minded white children were cared for during the biennium 1926-1928.

All county convict camps (43 in number in 1928) and all other prison camps are inspected at least once each year. It is estimated by the division of penal institutions that in 1927 approximately 50,000 people were committed to the county jails, 8,600 to the county prison camps, and 798 to the State Prison. About half of the jail, two-thirds of the road camp, and half of the State Prison commitments were Negroes. (Negroes are about 28 per cent of the total population.)

In this connection it should be mentioned that most of the road camps are in the eastern counties where there are more Negroes than elsewhere in the state.

Nine counties have discontinued their county homes and board their inmates in the county homes of adjoining counties. The other 91 counties maintain county homes, not more than one-third of which have an average daily population of more than 20. At present North Carolina counties are expending over $900,000 each year to care for less than 2,200 inmates. The legislature of 1923 passed an act which makes it permissible for two or more counties to establish and maintain jointly a hospital-home for aged and infirm persons, but thus far, unlike Virginia and Alabama, no counties have constructed such an institution. For outdoor relief the counties spent an additional $300,000, making a total of $1,200,000 spent in North Carolina in 1928 for poor relief.

Division of County Organization. This division stresses the value to the county of constructive county welfare work, the importance of utilizing trained workers, and the need of coöperation and understanding between the public and private agencies within the county. The Institute for Public Welfare is under the direct supervision of the director of this division. These Institutes, one for the whites and one for the Negroes, serve to keep the county and state welfare workers in touch with the latest thinking in the field of welfare work, but what is equally important, they provide a much needed contact between state and county workers.

Division of Mental Health and Hygiene. The greater part of the work of this division of the state's welfare program has to do with the study of individual cases. However, educational work, acquisition and filing of data, and the inspection of public and private institutions for nervous and mental cases form a very important part of its activities. This division was created to demonstrate the part played by mental conditions in socio-economic maladjustments, but a limited staff makes it impossible to handle all cases. If it were properly to meet the demands made on it, it would have to increase its present staff of a director on a one-third time basis and a secretary on half-time basis, to one consisting of three or four whole-time trained specialists.

Division of Work among Negroes. The division of work among Negroes was established January 1, 1925. In June, 1928, 26 counties were organized or in the process of organization for Negro welfare work. At that time there were 20 trained Negro social workers employed by city and county welfare departments.

The need for public welfare programs among the Negroes is accentuated by the low economic scale upon which the masses of them live and the presence of much illiteracy and near-illiteracy. One serious problem, for instance, is an excessive death rate, due in part to ignorance, in part to living conditions, and among other things to the presence of more than 5,000 Negro midwives who deliver around three-fourths of all Negro children. We have already pointed out the appalling infant death rate among the Negroes that results. At present the midwife cannot be dispensed with, however, because of the limited financial resources of the majority of Negroes.

The director of the division of work among Negroes is well acquainted with the needs of his people, and his efforts have met with remarkable success. The work is still in its first stages. The Public Welfare Institute for Negroes provides an annual get-together for the trained Negro workers and laymen who are interested in public welfare programs. Trained workers are being supplied by the Atlanta School of Social Work in Atlanta and the Bishop Tuttle Training School at Raleigh. The division of work among Negroes has the support of a Negro advisory committee composed of the leading Negro citizens of the state.

Division of School Attendance. The organization of this division, established in June, 1928, emphasizes the tendency of the state welfare department to stress more and more the preventive side of its program. The particular aims of this division are to assist county officers toward a better enforcement of the school attendance law and to investigate cases of non-attendance.

Publicity Director. The work of the publicity director is of first importance, for in his hands to no small degree lies the success of the North Carolina plan of public welfare. It relies largely on local initiative and responsibility, which means that the people must become familiar with the value of the work.

Some Recommendations. The organization of the North Carolina plan for public welfare puts a premium upon the development of a local leadership which will assume responsibility for local conditions and in this way is making a real contribution to democratic government in the state. No part of its work could be eliminated without serious loss to the state. The greatest need is for an educational program from the state board and elsewhere which will keep continually before the people of the state the possibilities of the present system.

The number of whole-time county superintendents of public welfare should be increased as rapidly as possible, but as there are some counties which can scarcely afford the added expense of a whole-time worker, it would be well for the state board to devise a plan whereby two adjoining counties may together elect and support him. As a further inducement to increase the number of whole-time superintendents and at the same time to facilitate supervision of county work and connect it closely with the state program, it might be well for the state board to provide part of the salary of all superintendents of public welfare.

The county superintendent of public welfare should be elected by the county board of public welfare, rather than by the county commissioners and board of education as at present. The county board should make up a budget and submit it to the county commissioners. At present the members of the county board of public welfare are appointed by the State Board of Charities and Public Welfare. Probably it would be better for one member to be appointed by the county commissioners, one by the county board of education, and a third by the county board of health, the appointments to be confirmed by the State Board of Charities and Public Welfare.

Due to the numerous small and sparsely settled counties in North Carolina, there are many instances where it would be well to consolidate the jails, convict camps, and county poorhouses. (Still better would be the consolidation of counties.) The local pride of the people in these poor but proud counties blocks the consolidations which the common-sense view of the situation suggests. In the end pride will bow to the tax collector.

These recommendations have to do with the county, for the success of the North Carolina plan of public welfare depends upon that functional administrative unit. The state board can make its greatest contribution by continuing and improving its services to the counties already definitely organized, and in educating counties not yet organized into an appreciation of the possibilities of, and urgent need for, public welfare work. In the meantime much good can be accomplished by working in coöperation with local agencies and groups of public-spirited citizens that are doing the local welfare work in the absence of accepted responsibility by the home counties.

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APPENDIX

The chapters comprising this book are based very largely on official data that have been compiled by the Department of Rural Social-Economics, the University of North Carolina. Since 1914 about 3,000 tables have been compiled in which the states of the Union and the counties of North Carolina have been ranked on some comparable basis in a variety of economic and social concerns. Practically all of the following tables were compiled by the author, and most of them have appeared in recent issues of the *News Letter*. In order that this volume might not become too bulky, only recent and significant tables have been selected from those available.

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TABLE I (Ch. I)*

PER CENT OF LAND AREA UNDER CULTIVATION, 1920

Rank	Counties	Per Cent	Rank	Counties	Per Cent
1	Alleghany	61.2	51	Nash	28.8
2	Ashe	57.8	52	Martin	28.3
3	Rowan	46.3	53	Orange	27.4
4	Lincoln	43.7	54	Currituck	27.0
5	Watauga	43.3	55	Rutherford	26.8
6	Union	43.2	56	Sampson	26.2
7	Catawba	43.1	57	Randolph	25.7
8	Iredell	42.7	58	Chatham	25.4
9	Edgecombe	42.5	59	Camden	25.1
10	Cleveland	41.7	60	Avery	24.1
11	Wilson	41.2	60	Harnett	24.1
12	Davie	40.9	62	Haywood	23.4
13	Cabarrus	40.8	63	Wilkes	23.3
14	Greene	39.9	64	Richmond	23.2
15	Mecklenburg	39.6	65	Henderson	23.1
16	Wayne	38.3	66	Lee	22.1
17	Madison	38.0	67	Cumberland	21.5
17	Yadkin	38.0	68	Gates	21.3
19	Gaston	37.5	69	Durham	21.2
20	Person	37.3	70	Caldwell	20.3
21	Caswell	37.1	71	Jones	19.8
22	Pitt	36.4	72	Hoke	19.7
23	Lenoir	36.1	73	Duplin	19.5
24	Pasquotank	35.7	74	Bertie	19.3
25	Davidson	35.2	75	Clay	17.6
25	Franklin	35.2	76	Polk	17.2
27	Halifax	35.1	77	Burke	17.1
28	Alamance	35.1	78	Washington	16.9
29	Forsyth	35.0	79	Pamlico	16.5
30	Granville	34.9	80	New Hanover	16.0
30	Johnston	34.9	80	Macon	16.0
32	Vance	33.7	82	Jackson	15.7
33	Surry	33.5	83	Beaufort	14.7
34	Scotland	33.4	84	Montgomery	14.5
35	Alexander	33.1	85	Cherokee	14.3
36	Robeson	33.0	86	Craven	14.1
37	Guilford	32.9	86	Moore	14.1
38	Stanly	32.8	88	Columbus	13.5
39	Northampton	32.5	89	McDowell	11.6
40	Mitchell	32.4	90	Onslow	11.3
41	Yancey	32.2	91	Bladen	10.9
42	Chowan	32.1	92	Hyde	9.3
43	Wake	31.9	93	Graham	9.1
44	Anson	31.5	94	Pender	8.4
45	Stokes	31.4	95	Transylvania	7.9
46	Buncombe	30.4	96	Swain	7.8
47	Hertford	30.3	97	Tyrrell	7.4
48	Rockingham	30.2	98	Brunswick	5.6
49	Perquimans	30.0	99	Carteret	4.7
50	Warren	29.7	100	Dare	0.4

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* Based on the 1920 Census of Agriculture.

TABLE II (Ch. II)*

FORESTRY FACTS, 1925

State	Forest Area 1920 Acres	Public Forests 1925 Acres	Forest Planted 1925 Acres	Lumber Production Millions Board Feet
Alabama	20,000,000	315,116	118	2,236
Arizona	5,350,000	11,353,022	1,837	146
Arkansas	21,500,000	968,842	1,272	1,597
California	18,275,000	19,235,058	66,134	2,043
Colorado	8,682,000	13,424,828	34,576	71
Connecticut	1,451,000	44,543	11,260	42
Delaware	350,000	......	10	7
Florida	19,000,000	344,691	1,156	1,064
Georgia	20,000,000	238,538	103	1,365
Idaho	16,361,000	19,993,846	45,896	1,141
Illinois	3,148,000	42,508	40,431	29
Indiana	3,500,000	18,477	3,640	179
Iowa	2,314,000	12,000	220,000	...
Kansas	......	445	183,055	...
Kentucky	9,400,000	41,284	1,800	207
Louisiana	17,365,000	204,200	16,000	3,293
Maine	15,000,000	363,216	10,000	330
Maryland	2,228,000	28,754	923	89
Massachusetts	2,241,000	209,603	40,000	110
Michigan	18,400,000	1,210,002	45,323	798
Minnesota	20,900,000	2,037,020	181,642	579
Mississippi	17,000,000	......	55	3,128
Missouri	13,820,000	71,500	10,000	187
Montana	13,926,000	16,474,330	28,227	389
Nebraska	3,500,000	221,193	213,982	...
Nevada	484,000	4,976,558	721	...
New Hampshire	3,944,000	440,674	8,843	261
New Jersey	2,000,000	80,969	3,502	10
New Mexico	5,550,000	8,666,455	2,090	152
New York	12,100,000	2,311,981	96,312	198
N. Carolina	*18,000,000*	*500,613*	*4,701*	*1,041*
N. Dakota	......	17,550	53,053	...
Ohio	4,000,000	103,050	6,896	141
Oklahoma	8,000,000	88,780	2,519	158
Oregon	23,275,000	13,461,154	32,014	4,216
Pennsylvania	12,000,000	1,329,148	76,416	331
Rhode Island	280,000	104	400	4
S. Carolina	10,000,000	58,101	66	980
S. Dakota	1,173,000	1,144,357	133,738	47
Tennessee	12,000,000	318,189	50	642
Texas	15,000,000	57,682	3,700	1,578
Utah	3,600,000	7,549,283	8,250	6
Vermont	2,792,000	37,340	9,294	126
Virginia	12,000,000	590,297	236	709
Washington	17,550,000	10,950,577	17,198	7,027
W. Virginia	8,500,000	238,124	758	583
Wisconsin	17,800,000	338,000	5,500	1,068
Wyoming	5,716,000	8,528,740	2,962	16
Total	469,475,000	148,640,742	1,626,659	38,339

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* *News Letter,* vol. XIV, no. 24.

TABLE III (Ch. II)*

VALUE OF MINERAL PRODUCTION, 1927

Rank	County	Value of Output	Rank	County	Value of Output
1	Surry	$1,468,113	32	Cumberland	$ 86,600
2	Mitchell	998,360	33	Caswell	84,717
3	Rowan	960,654	34	Durham	79,000
4	Guilford	745,501	35	Madison	73,590
5	Swain	724,265	36	Johnston	60,000
6	Wayne	701,823	37	Macon	50,941
7	Buncombe	542,862	38	Craven	44,440
8	Chatham	538,345	39	Alamance	39,000
9	Lee	464,178	40	Columbus	38,913
10	Anson	405,941	41	Northampton	32,517
11	Wilson	382,414	42	Rutherford	31,729
12	Henderson	330,288	43	Randolph	29,400
13	Yancey	327,981	44	Pender	27,000
14	Stokes	322,088	45	Nash	24,856
15	Vance	303,000	46	Pitt	24,332
16	Wake	276,000	47	Cabarrus	23,000
17	Stanly	246,028	48	Bertie	20,000
18	Harnett	196,010	49	Wilkes	18,621
19	Forsyth	194,900	50	Caldwell	17,970
20	Davidson	184,795	51	Washington	16,332
21	Union	167,523	52	Pasquotank	16,000
22	Iredell	162,009	52	Robeson	16,000
23	Moore	153,500	54	Lenoir	15,351
24	Gaston	150,543	55	Cleveland	13,380
25	Mecklenburg	118,640	56	Montgomery	11,700
26	Rockingham	118,268	57	Sampson	11,438
27	Cherokee	108,000	58	Beaufort	9,050
28	Halifax	98,357	59	Burke	6,500
29	McDowell	95,078	60	New Hanover	900
30	Alexander	95,000	61	Carteret	650
31	Avery	89,120	62	Orange	200
No production reported from 38 counties.					$12,566,882

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* *Conservation and Industry,* vol. VI, no. 4, N. C. Dept. of C. and D.

TABLE IV (Ch. IV)*

NATIVE STATES OF NOTABLES IN *WHO'S WHO* FOR 1926

Rate per 100,000 Inhabitants as of 1870

The rank of a few states like North and South Dakota and Colorado may be considerably off, as their territory was increasing so rapidly in population about 1870-1880, the average time of birth of persons listed in *Who's Who*. The New England states rank high, as would be expected. Along with them appear western states that were sparsely settled but growing rapidly around 1870.

Rank	State	Notables Born in State	Rate per 100,000 Population	Rank	State	Notables Born in State	Rate per 100,000 Population
1	N. Dakota	11	460	24	Wisconsin	698	66
2	S. Dakota	37	308	26	New Jersey	579	64
3	Colorado	79	197	27	Maryland	495	63
4	Massachusetts	2,050	141	28	Michigan	718	61
5	Nebraska	163	133	29	Arizona	6	60
6	Connecticut	606	113	29	Pennsylvania	2,129	60
7	Washington	26	108	31	Virginia	706	58
8	New Hampshire	339	107	32	Indiana	914	54
8	Rhode Island	232	107	33	Nevada	20	48
10	Idaho	15	100	34	W. Virginia	196	44
11	Utah	85	98	35	Missouri	726	42
12	Montana	20	95	36	S. Carolina	283	40
12	Vermont	315	95	37	Kentucky	510	39
14	Delaware	106	85	*38*	*N. Carolina*	*385*	*36*
14	Maine	533	85	39	Texas	274	34
16	New York	3,565	81	40	Tennessee	419	33
17	Wyoming	7	78	41	Alabama	295	30
18	Minnesota	337	77	42	Florida	52	28
19	Ohio	1,975	74	43	Georgia	325	27
20	California	396	71	44	Mississippi	218	26
20	Kansas	258	71	45	Arkansas	120	25
22	Illinois	1,608	68	46	Louisiana	165	23
23	Oregon	61	67	47	New Mexico	7	8
24	Iowa	788	66	..	Oklahoma	8	..

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* *News Letter,* vol. XII, no. 49.

TABLE V (Ch. IV)*

BORN IN NORTH CAROLINA

But Living in Other States in 1920

Born in North Carolina but residing in other states, 443,844 persons. Born in other states but living in North Carolina, 157,996. Net loss sustained by North Carolina, 285,848. Only five states have sustained a net population loss to North Carolina.

Rank	Born in N. C. Living in	Number	Net Loss to N. C.	Rank	Born in N. C. Living in	Number	Net Gain from N. C.
1	S. Carolina	50,040	12,283	23	Louisiana	2,907	2,394
2	Vermont	75	199	24	Kansas	3,145	2,432
3	Maine	150	198	25	Michigan	3,312	2,517
4	New Hampshire	104	115	26	Massachusetts	3,832	2,733
5	Wisconsin	361	5	27	Kentucky	5,685	3,427
			Net Gain from N. C.	28	Alabama	6,660	3,863
				29	Illinois	5,463	4,161
				30	Mississippi	5,539	4,310
				31	Missouri	5,476	4,644
6	Nevada	138	123	32	Indiana	6,273	5,104
7	Rhode Island	512	169	33	California	5,742	5,492
8	S. Dakota	320	234	34	Washington	5,729	5,544
9	Minnesota	579	400	35	Oklahoma	7,667	7,434
10	N. Dakota	460	402	36	Dis. of Col.	8,025	7,505
11	Delaware	676	403	37	Maryland	10,252	8,187
12	Nebraska	1,195	521	38	Ohio	11,598	9,505
13	Utah	573	522	39	New Jersey	10,451	9,507
14	Wyoming	585	546	40	Arkansas	11,128	10,515
15	Arizona	940	873	41	W. Virginia	13,636	11,901
16	New Mexico	997	953	42	Texas	14,966	13,804
17	Montana	1,515	1,450	43	New York	17,803	13,938
18	Connecticut	2,037	1,593	44	Florida	17,358	15,484
19	Iowa	2,122	1,743	45	Tennessee	27,744	16,675
20	Idaho	2,028	1,943	46	Pennsylvania	20,877	17,105
21	Oregon	2,382	2,308	47	Georgia	29,118	17,945
22	Colorado	2,518	2,331	48	Virginia	113,151	75,918

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* *News Letter,* vol. IX, no. 50. This table considers only migrants living when the Census was made.

TABLE VI (Ch. IV)*

WHITE AND NEGRO POPULATION RATIOS, 1920

(Foreign-Born and Indians Not Included)

Rank	Counties	Per Cent		Rank	Counties	Per Cent	
		White	Negro			White	Negro
1	Mitchell	99.5	0.5	51	Moore	69.2	29.8
2	Watauga	98.5	1.8	52	Orange	68.4	31.5
3	Madison	98.2	1.7	53	Durham	68.3	31.2
4	Yancey	98.1	1.8	54	Columbus	67.7	31.9
5	Cherokee	97.7	1.8	55	Chatham	67.0	32.8
6	Ashe	97.6	2.4	56	Mecklenburg	66.3	33.0
7	Avery	97.5	2.4	57	Forsyth	65.8	33.8
8	Clay	97.1	2.8	58	Sampson	65.6	33.7
9	Haywood	96.8	3.0	59	Pamlico	64.4	35.5
10	Graham	96.7	0.1	60	Currituck	63.6	36.3
11	Macon	96.2	3.6	61	Brunswick	63.4	36.1
12	Alleghany	95.5	4.5	62	Duplin	63.1	36.8
13	Yadkin	93.3	6.7	63	Hyde	61.0	38.9
14	Transylvania	92.9	6.8	64	Beaufort	60.8	39.0
14	Wilkes	92.9	7.1	64	Wake	60.8	38.9
16	Alexander	92.8	7.2	66	Camden	60.5	39.5
17	Swain	92.4	0.9	67	Cumberland	59.3	39.8
17	Surry	92.4	7.3	68	Bladen	58.8	41.0
19	Dare	92.1	7.8	69	Richmond	58.6	41.2
20	Jackson	91.7	3.9	70	Nash	57.4	42.4
21	Caldwell	90.1	9.9	71	New Hanover	57.2	40.6
22	Davidson	89.8	10.2	72	Person	56.9	42.1
23	Henderson	89.5	10.0	73	Wayne	56.1	43.5
24	Catawba	89.3	10.6	74	Wilson	55.6	44.2
25	Stokes	88.9	11.1	75	Franklin	55.5	44.5
26	Randolph	88.4	11.5	76	Lenoir	55.4	44.2
27	McDowell	88.1	11.8	76	Pasquotank	55.4	44.4
28	Burke	87.1	11.4	78	Vance	55.0	44.6
29	Lincoln	87.4	12.5	78	Jones	55.0	44.9
30	Stanly	86.8	12.9	80	Martin	53.1	46.9
31	Rutherford	85.8	14.2	81	Granville	52.5	47.4
32	Davie	85.0	15.0	82	Gates	51.7	48.2
33	Carteret	84.3	15.5	83	Perquimans	50.9	49.1
34	Buncombe	83.7	15.0	83	Washington	50.9	48.7
35	Polk	82.6	16.9	85	Caswell	50.2	49.8
36	Cleveland	82.4	17.6	86	Chowan	50.0	49.7
37	Gaston	81.8	18.1	87	Pender	49.9	49.5
38	Cabarrus	81.0	18.8	88	Greene	49.5	50.5
39	Iredell	80.5	19.4	89	Pitt	49.2	50.5
40	Rowan	78.5	21.0	90	Anson	47.5	52.5
41	Guilford	77.7	21.9	91	Craven	47.0	52.3
42	Montgomery	77.4	22.5	92	Robeson	46.4	37.1
43	Alamance	77.0	22.9	93	Bertie	43.1	56.8
44	Johnston	76.4	23.5	94	Hoke	42.8	55.3
45	Union	75.8	24.1	95	Edgecombe	41.0	58.8
46	Rockingham	75.7	24.1	96	Halifax	40.6	59.2
47	Harnett	72.7	24.1	97	Northampton	40.3	59.6
48	Lee	70.8	29.0	98	Hertford	38.8	61.1
49	Onslow	69.7	30.2	99	Scotland	38.7	59.0
50	Tyrrell	69.5	30.4	100	Warren	35.6	64.0

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* Based on the 1920 Census.

TABLE VII (Ch. IV)*

NUMBER OF MARRIAGES PER DIVORCE, 1926 AND 1927

A two-year period is taken because of the variations from one year to another.

Rank	County	Marriages Per Divorce	Rank	County	Marriages Per Divorce
1	Jones	No divorce	50	Burke	16.8
1	Pender	No divorce	52	Alleghany	16.3
3	Camden	268.0	52	Rockingham	16.3
4	Onslow	91.0	54	Alexander	16.1
5	Yadkin	77.2	54	Pasquotank	16.1
6	Granville	74.4	56	Catawba	15.6
7	Hoke	56.0	56	Cumberland	15.6
8	Stokes	51.0	58	Cherokee	14.2
9	Johnston	47.9	59	Swain	14.1
10	Currituck	47.3	60	Haywood	13.8
11	Hyde	43.3	61	Edgecombe	13.7
12	Sampson	37.3	62	Forsyth	13.5
13	Pamlico	37.2	62	Wake	13.5
14	Davie	36.3	64	Vance	13.1
14	Chatham	36.3	64	Davidson	13.1
16	Lee	33.7	66	Greene	12.9
17	Lincoln	32.6	67	Nash	12.8
18	Alamance	31.4	68	Lenoir	12.6
19	Duplin	30.3	69	Guilford	12.5
20	Randolph	29.3	70	Anson	12.3
21	Martin	29.2	71	Wilson	12.2
22	Bladen	28.3	72	Montgomery	12.0
23	Franklin	27.8	72	Wayne	12.0
24	Caswell	26.5	74	Carteret	11.8
25	Chowan	26.1	75	Orange	11.6
26	Ashe	25.4	76	Cabarrus	11.2
26	Wilkes	25.4	76	Rowan	11.2
28	Gates	24.8	78	Pitt	10.9
28	McDowell	24.8	79	Washington	10.7
30	Perquimans	22.8	80	Madison	10.4
31	Surry	22.5	81	Stanly	10.2
32	Iredell	21.6	82	New Hanover	10.1
32	Warren	21.6	83	Hertford	10.0
34	Dare	21.3	83	Transylvania	10.0
35	Moore	20.5	85	Durham	9.9
36	Union	20.4	86	Watauga	9.7
37	Northampton	20.3	87	Rutherford	9.5
38	Caldwell	19.8	88	Yancey	8.9
39	Macon	19.6	89	Clay	8.7
40	Jackson	19.4	89	Columbus	8.7
40	Mitchell	19.4	91	Bertie	8.4
42	Tyrrell	19.2	91	Mecklenburg	8.4
43	Brunswick	18.6	93	Polk	8.1
44	Henderson	18.1	94	Robeson	7.3
45	Halifax	17.8	95	Cleveland	6.5
45	Harnett	17.8	96	Buncombe	6.2
47	Craven	17.2	97	Avery	5.7
48	Graham	17.1	98	Richmond	3.9
48	Person	17.1	99	Gaston	3.5
50	Beaufort	16.8	100	Scotland	3.2

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* *News Letter,* vol. XV, no. 21.

TABLE VIII (Ch. VI)*

VALUE OF FARM LAND AND BUILDINGS

North Carolina ranks 23rd in the per acre value of farm land, cultivated and uncultivated, the amount being $50.02. In farm land per farm we rank low, and in cultivated land per farm we rank last, thus largely accounting for our low rank in value on a per farm basis.

United States average value of farm land and buildings, $7,776 per farm.

Rank	State	Land and Buildings Per Farm	Value Farm Land Per Acre	Rank	State	Land and Buildings Per Farm	Value Farm Land Per Acre
1	Iowa	$23,245	$149.06	25	Massachusetts	$7,611	$107.53
2	California	23,179	114.70	26	Utah	7,403	38.52
3	Nebraska	19,755	60.04	27	New York	7,250	71.01
4	Illinois	18,636	136.79	28	Maryland	7,047	77.78
5	South Dakota	18,066	44.89	29	Michigan	6,696	71.41
6	Nevada	17,571	16.03	30	Texas	6,563	27.83
7	North Dakota	13,407	29.67	31	Pennsylvania	5,871	72.20
8	Arizona	13,344	13.02	32	Delaware	5,861	66.83
9	Kansas	13,252	50.27	33	New Mexico	5,473	6.21
10	Minnesota	12,730	79.76	34	Oklahoma	5,324	33.34
11	Wyoming	11,113	9.25	35	Vermont	4,940	34.98
12	Oregon	11,039	43.71	36	Virginia	4,587	51.63
13	Colorado	10,208	24.51	37	New Hampshire	4,147	38.62
14	Washington	9,921	57.65	38	West Virginia	3,957	39.80
15	Wisconsin	9,835	86.94	39	Maine	3,943	38.20
16	Montana	9,666	13.85	40	Kentucky	3,282	42.60
17	Idaho	9,213	45.93	*40*	*North Carolina*	*3,282*	*50.02*
18	New Jersey	8,837	136.23	42	Tennessee	3,016	42.54
19	Connecticut	8,726	110.69	43	South Carolina	2,654	43.07
20	Indiana	8,667	85.20	44	Louisiana	2,467	36.97
21	Florida	8,111	80.86	45	Arkansas	2,442	34.56
22	Rhode Island	8,110	103.25	46	Georgia	2,366	26.83
23	Ohio	7,941	87.44	47	Mississippi	1,788	28.64
24	Missouri	7,730	61.70	48	Alabama	1,748	21.32

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* *News Letter,* vol. XII, no. 39. Based on the 1925 Census.

TABLE IX (Ch. VI)*

LIVESTOCK VALUES PER FARM, 1920

Livestock values have greatly decreased since 1920, but the decreases have been fairly uniform the country over. Therefore the rank of the states remains practically unchanged.

Livestock values per farm vary (1) according to the number and quality of farm animals, and (2) according to the size of farms.

Rank	States	Livestock Values Per Farm	Rank	States	Livestock Values Per Farm
1	Nevada	$9,451	25	New Jersey	$1,214
2	Wyoming	5,581	26	Rhode Island	1,185
3	Arizona	5,258	27	Pennsylvania	1,181
4	South Dakota	3,196	28	Oklahoma	1,125
5	New Mexico	3,137	29	Ohio	1,121
6	Iowa	2,876	30	Massachusetts	1,048
7	Nebraska	2,704	31	Michigan	1,040
8	Colorado	2,686	32	Connecticut	1,036
9	Montana	2,673	33	Maryland	1,003
10	Idaho	2,285	34	New Hampshire	934
11	Utah	2,105	35	Delaware	848
12	Oregon	2,027	36	Maine	825
13	North Dakota	2,021	37	West Virginia	771
14	Kansas	1,924	38	Tennessee	686
15	Illinois	1,881	39	Virginia	655
16	California	1,879	40	Florida	654
17	Minnesota	1,710	41	Louisiana	613
18	Wisconsin	1,703	42	Kentucky	585
19	New York	1,623	43	Arkansas	550
20	Missouri	1,482	44	Georgia	499
21	Vermont	1,458	45	Mississippi	496
22	Texas	1,360	46	South Carolina	475
23	Indiana	1,274	*47*	*North Carolina*	*442*
24	Washington	1,242	48	Alabama	441

* *News Letter,* vol. IX, no. 1. Based on 1920 Census of Agriculture.

TABLE X (Ch. VI)*

DAIRY COWS PER FARM IN THE UNITED STATES

Beef cattle are excluded, although many cows classed as beef are being milked. United States total 17,700,000 cows two years old and over classed as dairy, or 2.78 dairy cows per farm.

Rank	State	Cows 2 Yrs. Old & Over Classed as Dairy	No. of Dairy Cows Per Farm	Rank	State	Cows 2 Yrs. Old & Over Classed as Dairy	No. of Dairy Cows Per Farm
1	Wisconsin	1,961,019	10.15	25	Arizona	32,956	3.05
2	Vermont	279,448	10.10	26	Maine	151,983	3.04
3	New York	1,375,576	7.28	27	Colorado	163,814	2.82
4	Minnesota	1,314,742	7.00	28	Utah	71,445	2.75
5	Rhode Island	21,961	5.62	29	Nebraska	230,502	2.59
6	Connecticut	113,866	5.10	30	Kansas	381,722	2.30
7	Nevada	17,431	4.45	31	Montana	104,344	2.14
8	Massachusetts	145,631	4.36	32	Wyoming	33,110	2.13
9	Pennsylvania	861,014	4.30	33	Missouri	518,611	1.99
10	Michigan	807,800	4.20	34	Oklahoma	361,434	1.83
11	New Jersey	122,780	4.15	35	Texas	731,203	1.57
12	California	562,936	4.13	36	West Virginia	138,696	1.54
13	North Dakota	312,079	4.11	37	Virginia	291,978	1.51
14	New Hampshire	81,504	3.87	38	Kentucky	388,070	1.50
15	Illinois	836,687	3.71	39	Tennessee	361,309	1.43
16	Oregon	204,890	3.66	40	Alabama	304,280	1.28
17	Washington	267,183	3.65	41	Mississippi	320,460	1.25
18	Maryland	172,791	3.53	42	New Mexico	39,385	1.24
19	Indiana	597,788	3.50	43	Arkansas	272,069	1.23
20	Idaho	139,405	3.44	44	Georgia	255,785	1.03
20	Ohio	841,637	3.44	45	S. Carolina	145,982	0.85
22	Delaware	33,793	3.29	*46*	*N. Carolina*	*251,211*	*0.83*
23	Iowa	692,508	3.24	47	Louisiana	98,167	0.78
24	South Dakota	243,629	3.06	48	Florida	43,641	0.74

* *News Letter,* vol. XII, no. 22. Based on Census as of Jan. 1, 1925.

TABLE XI (Ch. VII)

INCREASE AND DECREASE IN FARMS, 1910-1925

During this fifteen-year period our farms increased 29,757, or 11.7 per cent. Only three states, Texas, California, and Minnesota, had a larger gain in farms.

Rank	County	Number Farms 1925	Increase 1910-25 Per Cent	Rank	County	Number Farms 1925	Increase 1910-25 Per Cent
1	Scotland	2,210	48.4	43	Clay	859	12.4
2	Richmond	2,384	47.0	44	Vance	2,263	11.8
3	Nash	6,007	43.2	45	Northampton	3,793	10.2
4	Lenoir	3,353	38.2	46	Bladen	2,749	10.1
5	Wilson	4,616	35.5	47	Pamlico	1,191	10.0
6	Pitt	6,228	35.0	47	Gates	1,584	10.0
7	Edgecombe	3,953	34.9	49	Ashe	3,576	9.8
8	Sampson	5,906	30.9	50	Rowan	3,557	9.7
9	Washington	1,273	30.5	51	Yancey	2,367	9.3
10	Martin	2,763	29.4	52	Surry	4,567	8.9
11	Chowan	1,261	28.1	53	Montgomery	1,817	8.6
12	Wayne	4,995	27.2	54	Bertie	3,444	8.1
13	Alamance	3,161	26.0	55	Guilford	4,067	7.7
14	Beaufort	3,711	25.7	56	Wake	6,604	7.6
15	Lee	1,593	25.2	57	Anson	3,567	7.0
16	Johnston	7,515	24.7	58	Orange	2,082	5.8
16	Granville	4,065	24.7	59	Randolph	4,241	5.7
18	Cumberland	3,151	24.3	60	Durham	1,700	5.2
18	Hoke*	2,127		61	Polk	1,225	5.0
18	Robeson	7,048		61	Onslow	2,165	5.0
21	Forsyth	3,239	22.3	63	Lincoln	2,343	4.4
22	Pasquotank	1,530	21.0	64	Iredell	4,135	4.2
23	Rockingham	3,846	20.6	65	Davie	1,869	4.1
24	Franklin	4,290	20.0	66	Stokes	3,473	3.4
25	Person	2,804	18.9	67	Jones	1,408	2.9
26	Greene	2,855	18.8	68	Union	4,991	2.7
27	Harnett	3,219	18.7	69	Haywood	2,175	2.3
28	Yadkin	2,910	17.5	70	Pender	2,020	1.9
29	Warren	3,180	16.9	71	Rutherford	3,510	1.8
29	Moore	2,135	16.9	72	Stanly	2,485	1.6
31	Duplin	4,495	16.5	73	Craven	2,124	1.2
32	Cherokee	2,227	16.4	74	Avery**	1,463	0.3
33	Columbus	3,942	16.1	74	Caldwell	2,170	
34	Cleveland	4,070	15.8	74	Mitchell	1,622	
35	Davidson	4,022	14.7	74	Watauga	2,133	
36	Transylvania	1,023	14.6				Decrease
37	Camden	938	14.4	78	Wilkes	5,208	0.4
38	Jackson	2,163	13.9	79	Swain	1,370	0.9
39	Perquimans	1,496	13.5	80	Alleghany	1,438	1.9
39	Caswell	2,274	13.5	81	Hertford	2,212	2.0
41	Halifax	4,858	13.3	82	Chatham	3,539	2.9
42	Cabarrus	2,672	12.5	83	Tyrrell	675	3.3

* Formed in 1911 out of Cumberland and Robeson.

** Formed in 1911 out of Caldwell, Mitchell, and Watauga.

TABLE XI (Ch. VII) *Continued*

Rank	County	Number Farms 1925	Increase 1910-25 Per Cent	Rank	County	Number Farms 1925	Increase 1910-25 Per Cent
83	Alexander	1,860	3.3	93	Mecklenburg	4,013	7.7
85	Burke	2,474	3.6	94	Buncombe	3,798	8.3
86	Macon	1,865	4.0	95	Henderson	1,957	9.7
87	Carteret	934	4.8	96	New Hanover	368	12.3
88	McDowell	1,526	6.0	97	Gaston	2,439	14.8
89	Madison	3,073	6.1	98	Graham	642	16.6
89	Catawba	3,086	6.1	99	Brunswick	1,358	18.5
91	Currituck	873	6.3	100	Dare	79	43.3
92	Hyde	1,248	6.9				

TABLE XII (Chs. VI, VII)

INCREASE AND DECREASE OF FARM TENANTS, 1910-1925

In 58 counties farm tenants increased 27,250. In 42 counties farm tenants decreased 6,283. State net increase 20,967 farms operated by tenants. Only Texas had a larger increase of tenants.

Rank	County	No. Farm Tenants 1925	Per Cent Increase 1910–1925
1	Dare	6	500.0
2	Chowan	795	117.8
3	Washington	717	117.4
4	Martin	1,651	80.6
5	Beaufort	1,462	74.7
6	Columbus	937	67.3
7	Richmond	1,532	65.8
8	Bladen	762	65.7
9	Sampson	2,509	65.0
10	Nash	4,225	62.3
11	Scotland	1,784	60.2
12	Pitt	4,792	57.2
13	Lenoir	2,401	56.9
14	Harnett	1,474	56.3
15	Robeson	4,635	54.9
15	Hoke*	1,344	
15	Cumberland	1,542	
18	Edgecombe	1,159	54.4
19	Gates	614	51.3
20	Wilson	3,560	51.2
21	Johnston	4,262	49.2
22	Bertie	2,105	43.9
23	Wayne	3,599	43.4
24	Pamlico	366	42.9
25	Pender	464	41.4
26	Alamance	1,000	41.0
27	Duplin	2,004	40.7
28	Greene	2,316	40.2
29	Moore	643	38.3
30	Camden	587	35.6
31	Granville	2,541	35.4
32	Northampton	2,587	32.8
33	Pasquotank	800	31.5
34	Lee	612	28.8
35	Franklin	2,966	28.6
36	Cleveland	2,590	27.0
37	Hertford	1,538	25.2
38	Craven	987	25.1
39	Halifax	3,417	23.8
40	Currituck	413	22.6
41	Person	1,722	21.6
42	Warren	1,800	20.7
43	Perquimans	777	19.7
44	Wake	3,901	17.0
44	Surry	1,516	17.0
46	Vance	1,398	16.9
47	Onslow	810	15.2
48	Anson	2,422	14.3
49	Caswell	1,274	13.2
50	Rockingham	1,957	12.6
51	Forsyth	771	12.4
52	Yadkin	747	10.3
53	Montgomery	663	8.3
54	Davidson	822	6.8
55	Cabarrus	1,398	5.2
56	Iredell	1,639	4.6
57	Durham	947	3.7
58	Rutherford	1,616	1.7
			Decrease
59	Orange	719	1.2
60	Clay	262	1.9
61	Stokes	1,568	2.2
62	Davie	751	2.7
63	Union	2,677	4.2
64	Randolph	779	4.7
64	Jones	846	4.7
66	Rowan	1,159	5.3
67	Stanly	806	5.5
68	Tyrrell	189	6.4
69	Guilford	958	7.0
70	Lincoln	861	7.6
71	New Hanover	87	10.3
72	Hyde	616	11.3
73	Jackson	415	12.0
74	Mecklenburg	2,258	12.9
75	Yancey	609	15.6
76	Carteret	182	15.7
77	Chatham	1,187	17.2
78	Catawba	717	18.6
79	Burke	566	21.5

* Hoke was formed in 1911 out of Cumberland and Robeson.

TABLE XII (Chs. VI, VII) *Continued*

Rank	County	No. Farm Tenants 1925	Per Cent Increase 1910-1925	Rank	County	No. Farm Tenants 1925	Per Cent Increase 1910-1925
80	Ashe	403	22.0	90	Alleghany	147	33.8
81	Polk	374	24.1	91	Watauga	218	35.5
82	Swain	310	26.1	91	Mitchell	166	
83	Wilkes	954	27.2	91	Caldwell	444	
84	Graham	152	27.3	91	Avery**	141	
85	Gaston	1,029	27.7	95	Madison	894	37.8
86	McDowell	345	31.2	96	Transylvania	127	38.9
87	Alexander	285	31.5	97	Macon	304	42.6
88	Cherokee	458	31.9	98	Haywood	450	44.9
89	Brunswick	194	33.6	99	Buncombe	476	58.1
				100	Henderson	176	61.9

** Avery was formed in 1911 out of Watauga, Caldwell, and Mitchell.

TABLE XIII (Ch. VI)

INCREASE AND DECREASE OF NEGRO FARMERS, 1910-1925

State total of Negro farmers in 1925 was 80,966. The net increase during the fifteen-year period was 15,310, the largest increase of Negro farmers made by any state in the Union.

Rank	County	No. Negro Operators 1925	Per Cent Increase 1910-1925	Rank	County	No. Negro Operators 1925	Per Cent Increase 1910-1925
1	Washington	495	93.3	41	Bertie	1,975	18.6
2	Scotland	1,511	81.9	42	Caswell	146	18.4
3	Nash	2,708	75.9	43	Anson	1,963	18.0
4	Alleghany	49	68.9	44	Iredell	750	16.8
5	Lenoir	1,350	65.4	45	Onslow	553	16.6
6	Wilson	1,863	63.1	46	Pender	890	16.4
7	Pitt	3,091	58.6	47	Montgomery	395	15.1
8	Richmond	1,378	58.2	48	Hertford	1,315	14.7
9	Sampson	1,873	51.7	49	Randolph	392	12.3
10	Edgecombe	2,349	51.2	50	Polk	157	9.8
11	Martin	1,174	50.7	51	Rockingham	797	7.4
12	Chowan	565	47.8	52	Bladen	1,063	6.7
13	Beaufort	1,206	47.4	53	Durham	545	6.4
14	Hoke*	1,225	44.1	54	Jackson	168	6.3
14	Cumberland	1,365		55	Yadkin	162	5.8
14	Robeson	4,102		56	Columbus	885	5.7
17	Greene	1,294	43.9	57	Davidson	219	3.3
18	Wayne	1,955	43.6	58	Ashe	77	2.6
19	Cleveland	982	42.1	59	Guilford	645	2.4
20	Lee	464	38.5	59	Forsyth	297	2.4
21	Gates	616	37.1	61	Chatham	1,081	2.1
22	Pamlico	331	35.5	62	Cabarrus	121	1.6
23	Person	1,152	33.7	63	Rutherford	517	1.1
24	Granville	1,758	33.6	64	Vance	1,004	1.0
25	Alamance	787	32.7	65	Currituck	260	.4
26	Camden	345	31.6				Per Cent Decrease
27	Pasquotank	668	29.9				
28	Northampton	2,291	26.2	66	Davie	246	3.9
29	Harnett	870	25.9	67	Catawba	263	4.0
30	Franklin	1,760	25.8	68	Tyrrell	136	6.2
31	Moore	502	23.6	69	Jones	544	6.5
32	Perquimans	606	23.4	70	Surry	241	8.7
32	Hyde	547	23.4	71	Swain	165	10.3
34	Warren	2,147	23.2	72	Gaston	690	12.8
35	Duplin	1,372	23.1	73	Union	1,083	13.4
36	Halifax	650	22.4	74	Alexander	106	15.2
37	Johnston	1,398	21.7	75	Clay	21	18.5
38	Rowan	576	20.7	75	Cherokee	22	18.5
39	Orange	594	20.0	77	Burke	195	18.7
40	Wake	2,581	19.6	78	Mecklenburg	1,402	19.9

* Hoke formed in 1911 out of Robeson and Cumberland.

TABLE XIII (Ch. VI) *Continued*

Rank	County	No. Negro Operators 1925	Per Cent Increase 1910-1925	Rank	County	No. Negro Operators 1925	Per Cent Increase 1910-1925
79	Stokes	283	20.0	90	Brunswick	334	33.7
80	Macon	51	21.2	91	McDowell	105	34.3
81	Lincoln	243	21.8	92	Transylvania	15	37.5
82	Craven	803	22.1	93	Madison	18	43.7
83	Stanly	179	23.4	94	New Hanover	91	47.7
84	Carteret	76	28.9	95	Dare	5	50.0
85	Wilkes	244	33.1	96	Yancey	22	52.1
86	Avery**	17	33.2	97	Henderson	107	58.8
86	Caldwell	121		98	Buncombe	70	61.1
86	Watauga	14		99	Haywood	5	70.5
86	Mitchell	3		100	Graham	2	94.1

** Avery was formed in 1911 out of Caldwell, Watauga, and Mitchell.

TABLE XIV (Ch. VI)*

MEAT AND MILK ANIMAL UNITS PER FARM, 1925

Horses and mules are omitted because they are work stock and should not be confused with consumptive livestock. The parallel column gives the total meat and milk animal units—cattle, hogs, poultry, and sheep—for each county.

An animal unit equals one cow or steer, or two calves, or two heifers, or seven sheep, or fourteen lambs, or five hogs, or ten pigs, or one hundred chickens, based on the amount of feed consumed.

State total meat and milk animal units 676,702. State average meat and milk animal units per farm 2.38. North Carolina ranked last of all the states in meat and milk animal units per farm in 1920, and 46th in per cent of farms having pure-bred livestock.

Rank	County	Meat and Milk Units	
		Total	Per Farm
1	Alleghany	10,299	7.16
2	Haywood	15,483	7.12
3	Ashe	19,182	5.08
4	Henderson	9,403	4.80
5	Buncombe	18,129	4.77
6	Jackson	9,674	4.47
7	Clay	3,838	4.46
8	Macon	8,307	4.45
9	Watauga	9,324	4.37
10	Madison	12,785	4.16
11	Avery	5,984	4.09
12	New Hanover	1,429	3.88
13	Transylvania	3,842	3.75
13	Currituck	3,271	3.75
15	Cherokee	8,245	3.70
16	Pasquotank	5,648	3.69
17	Dare	291	3.68
18	Tyrrell	2,451	3.63
18	Graham	2,325	3.63
20	Mecklenburg	14,167	3.53
21	Swain	4,538	3.31
22	Gaston	8,142	3.26
23	Davie	6,069	3.25
24	Rowan	11,174	3.14
25	Guilford	12,903	3.12
25	Yancey	7,394	3.12
27	Cabarrus	8,232	3.08
28	Hyde	3,660	2.93
29	Gates	4,607	2.91
30	Perquimans	4,305	2.88
31	Mitchell	4,626	2.85
31	Camden	2,675	2.85
33	Washington	3,584	2.81
34	Union	13,979	2.80
34	Orange	5,839	2.80
36	Caldwell	6,066	2.79
37	Iredell	11,472	2.77
38	Catawba	8,515	2.76
39	Stanly	6,607	2.66
40	Alamance	8,311	2.63
41	Wilkes	13,613	2.61
41	McDowell	3,987	2.61
43	Davidson	10,399	2.58
44	Durham	4,376	2.57
44	Forsyth	8,320	2.57
46	Chowan	3,213	2.55
47	Chatham	8,948	2.53
48	Lincoln	5,907	2.52
49	Randolph	10,384	2.47
50	Rutherford	8,510	2.42
50	Pamlico	2,878	2.42
52	Alexander	4,475	2.41
53	Cleveland	10,970	2.35
54	Burke	5,527	2.24
55	Martin	6,127	2.22
56	Brunswick	3,002	2.21
57	Jones	3,058	2.17
58	Moore	4,593	2.15
59	Craven	4,530	2.13
60	Warren	6,522	2.08
60	Yadkin	6,048	2.08
62	Polk	2,525	2.06
63	Carteret	1,882	2.01
64	Anson	7,114	1.99
64	Montgomery	3,622	1.99
66	Surry	8,936	1.96
66	Bladen	5,394	1.96
68	Lee	3,109	1.95
69	Onslow	4,199	1.94
70	Bertie	6,565	1.91
71	Wake	12,510	1.89
72	Caswell	4,305	1.88

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* *News Letter,* vol. XIII, no. 25. Based on 1925 Census of Agriculture.

TABLE XIV (Ch. VI) *Continued*

RANK	COUNTY	MEAT AND MILK UNITS		RANK	COUNTY	MEAT AND MILK UNITS	
		Total	Per Farm			Total	Per Farm
73	Duplin	8,371	1.86	87	Richmond	3,903	1.64
73	Rockingham	7,166	1.86	88	Lenoir	5,486	1.63
73	Person	5,220	1.86	89	Wayne	8,088	1.62
76	Pender	3,739	1.85	90	Columbus	5,946	1.51
77	Stokes	6,383	1.84	90	Hoke	3,219	1.51
78	Hertford	3,992	1.80	92	Edgecombe	5,916	1.50
79	Sampson	10,591	1.79	93	Franklin	6,228	1.45
80	Granville	7,239	1.78	94	Greene	3,967	1.40
81	Cumberland	5,578	1.77	95	Robeson	9,753	1.38
82	Harnett	5,644	1.75	96	Northampton	5,156	1.36
83	Johnston	12,967	1.73	97	Pitt	8,364	1.34
83	Beaufort	6,418	1.73	98	Nash	6,634	1.10
85	Halifax	8,393	1.72	99	Scotland	2,272	1.03
86	Vance	4,064	1.69	100	Wilson	4,356	.94

TABLE XV (Ch. VI)*

FOOD AND FEED SUPPLIES IN 1920

Rank	Surplus Counties	Extent Self-Feeding Per Cent	Surplus	Rank	Deficit Counties	Extent Self-Feeding Per Cent	Deficit
1	Currituck	119	$ 297,000	40	Henderson	56	$1,529,000
2	Alleghany	106	101,000	40	Haywood	56	1,998,000
3	Camden	102	30,000	44	Caswell	55	1,389,000
	Deficit Counties		**Deficit**	44	Catawba	55	2,836,000
				46	Stokes	54	1,841,000
4	Northampton	100	5,000	46	Rowan	54	3,773,000
5	Hertford	98	82,000	46	Polk	54	778,000
6	Alexander	97	68,000	46	Cherokee	54	1,357,000
7	Pamlico	92	139,000	46	Montgomery	54	1,264,000
8	Bertie	89	518,000	46	Cleveland	54	3,035,000
9	Chowan	88	239,000	52	Moore	53	1,866,000
10	Tyrrell	85	160,000	53	Caldwell	52	1,884,000
11	Hyde	79	383,000	53	Wayne	52	3,953,000
12	Gates	78	472,000	53	Robeson	52	4,858,000
13	Clay	77	237,000	53	Harnett	52	2,537,000
14	Martin	75	1,016,000	57	Scotland	50	1,425,000
14	Washington	75	528,000	57	Columbus	50	2,873,000
16	Ashe	74	1,144,000	59	Edgecombe	49	3,671,000
17	Duplin	72	1,678,000	59	Transylvania	49	899,000
17	Perquimans	72	640,000	59	Pitt	49	4,449,000
19	Sampson	71	2,073,000	62	Union	48	3,713,000
19	Macon	71	748,000	62	Avery	48	995,000
21	Watauga	70	818,000	62	Surry	48	3,110,000
22	Pender	69	890,000	62	Rutherford	48	3,061,000
23	Randolph	67	2,024,000	62	Person	48	1,928,000
24	Yadkin	66	1,106,000	62	Bladen	48	1,946,000
24	Madison	66	1,351,000	68	Burke	47	2,228,000
26	Davie	65	936,000	68	Jones	47	1,072,000
27	Chatham	64	1,744,000	70	Wilson	46	3,688,000
28	Pasquotank	62	1,311,000	71	Alamance	45	3,374,000
28	Orange	62	1,294,000	71	Halifax	45	4,390,000
28	Iredell	62	2,738,000	73	Onslow	44	1,623,000
28	Greene	62	1,247,000	73	Anson	44	3,021,000
32	Yancey	61	1,166,000	73	Lee	44	1,375,000
33	Johnston	60	3,855,000	73	Lenoir	44	3,077,000
34	Beaufort	59	2,357,000	73	Warren	44	2,305,000
35	Lincoln	58	1,427,000	78	Cabarrus	43	3,524,000
35	Jackson	58	1,125,000	78	Granville	43	2,921,000
35	Wilkes	58	2,576,000	78	Stanly	43	2,896,000
35	Mitchell	58	964,000	78	Swain	43	1,398,000
39	Davidson	57	2,830,000	82	Nash	41	4,445,000
40	Hoke	56	964,000	82	Franklin	41	3,014,000
40	Graham	56	446,000	84	Brunswick	40	1,668,000

* *News Letter,* vol. VIII, no. 49.

TABLE XV (Ch. VI) *Continued*

Rank	Deficit Counties	Extent Self-Feeding Per Cent	Deficit	Rank	Deficit Counties	Extent Self-Feeding Per Cent	Deficit
84	Buncombe	40	$6,891,000	93	Mecklenburg	29	$9,967,000
84	Cumberland	40	3,802,000	94	Carteret	28	1,895,000
87	McDowell	38	1,881,000	94	Forsyth	28	9,294,000
88	Rockingham	35	5,117,000	96	Gaston	27	6,533,000
89	Richmond	34	2,990,000	96	Vance	27	2,991,000
89	Wake	34	8,858,000	98	Durham	18	5,798,000
91	Craven	33	3,452,000	99	New Hanover	9	5,852,000
92	Guilford	32	9,468,000	100	Dare	7	791,000

TABLE XVI (Ch. VI)*

PRODUCTION OF IMPORTANT CROPS IN NORTH CAROLINA

1866 TO 1928

Year	Cotton 1,000 Bales	Tobacco 1,000 Lbs.	Corn 1,000 Bu.	Wheat 1,000 Bu.	Oats 1,000 Bu.	S. Potatoes 1,000 Bu.	I. Potatoes 1,000 Bu.	Hay Tame 1,000 Tons
1866	91	39,424	21,657	2,846	2,949	....	831	163
1867	150	40,212	17,974	3,415	3,479	....	838	179
1868	140	41,016	23,366	2,971	3,479	....	838	186
1869	145	11,150	18,454	2,860	3,220	3,072	739	84
1870	170	30,000	22,500	4,218	2,750	....	742	169
1871	127	9,600	20,700	2,530	2,200	....	816	84
1872	180	13,200	24,012	3,289	2,860	....	848	90
1873	176	14,500	21,130	2,795	3,146	....	780	94
1874	238	8,500	22,186	2,878	3,083	....	702	105
1875	218	14,750	22,275	3,050	3,250	....	745	110
1876	210	16,225	23,000	3,000	3,530	....	850	116
1877	242	.....	22,800	3,900	3,980	....	853	126
1878	222	12,896	22,603	3,024	4,448	....	1,197	133
1879	390	26,986	28,020	3,397	3,838	4,576	723	90
1880	411	35,724	36,954	4,871	5,515	....	1,273	114
1881	380	24,828	26,977	4,579	4,081	....	710	91
1882	463	32,276	34,261	5,495	5,713	....	1,100	97
1883	398	29,048	28,692	4,231	5,142	....	1,313	96
1884	404	34,858	31,499	4,650	4,622	....	1,260	106
1885	407	37,417	25,199	2,790	4,483	....	1,256	97
1886	366	31,559	27,215	3,209	6,276	....	1,273	111
1887	444	29,155	35,830	5,094	8,504	....	1,114	160
1888	365	25,755	28,343	3,835	6,078	....	1,377	154
1889	336	36,375	25,784	4,292	4,513	5,665	1,199	170
1890	490	55,450	36,264	3,156	6,198	....	1,354	230
1891	415	49,004	37,676	4,075	5,120	....	1,378	187
1892	300	47,534	25,347	5,090	5,332	....	1,061	216
1893	400	44,898	29,954	5,938	7,674	....	1,777	306
1894	455	42,044	32,959	3,476	5,754	....	1,113	261
1895	398	114,525	36,378	4,749	7,652	....	1,461	310
1896	522	68,629	29,504	4,622	5,777	....	1,446	239
1897	647	57,729	31,324	4,170	5,821	....	1,075	250
1898	630	54,265	34,070	5,276	6,339	....	1,081	340
1899	**440	127,503	34,819	4,342	2,455	5,782	1,636	211
1900	477	119,505	29,790	5,961	5,046	6,072	1,063	177
1901	416	105,808	30,642	6,762	3,648	6,177	1,577	244
1902	550	142,521	37,623	3,056	3,024	6,160	1,593	190

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* Compiled for the author by Miss H. R. Smedes, Librarian, Department of Rural Social-Economics, University of North Carolina.

** From 1899, cotton production figures are census returns from ginners.

TABLE XVI (Ch. VI) *Continued*

YEAR	COTTON 1,000 BALES	TOBACCO 1,000 LBS.	CORN 1,000 BU.	WHEAT 1,000 BU.	OATS 1,000 BU.	S. POTATOES 1,000 BU.	I. POTATOES 1,000 BU.	HAY Tame 1,000 TONS
1903	529	134,729	38,595	3,229	2,470	6,984	1,651	207
1904	704	98,618	40,705	4,913	3,253	7,300	1,999	220
1905	619	83,156	37,596	3,975	3,118	6,935	1,993	201
1906	579	69,808	41,797	5,297	3,170	6,525	1,786	193
1907	605	100,875	45,078	5,320	2,995	7,020	2,024	190
1908	647	134,000	50,166	5,680	3,300	7,440	1,975	262
1909	601	138,813	34,064	3,827	2,783	8,493	2,372	299
1910	706	120,000	49,290	6,817	4,022	8,820	2,937	472
1911	1,076	99,400	49,680	6,636	3,614	6,622	1,488	304
1912	866	110,980	51,106	5,322	3,794	6,750	2,550	381
1913	793	167,500	55,282	7,078	4,485	8,000	2,400	419
1914	931	172,250	57,550	7,332	4,375	6,840	1,716	368
1915	699	198,400	60,900	9,810	8,050	8,925	3,150	648
1916	655	176,000	48,100	9,135	6,825	9,309	3,800	572
1917	618	239,400	58,400	8,600	4,400	8,550	4,500	572
1918	898	329,940	63,630	6,300	5,100	10,450	4,275	684
1919	830	280,163	40,998	4,745	1,671	7,960	2,854	696
1920	925	433,750	54,630	7,956	3,388	10,296	4,186	672
1921	776	252,450	49,254	4,500	3,060	10,302	4,048	821
1922	852	252,500	51,540	5,400	4,620	12,430	4,700	962
1923	1,020	409,500	58,568	6,038	6,600	10,500	4,300	955
1924	825	237,436	41,706	3,688	4,644	4,455	4,493	678
1925	1,102	380,165	44,400	4,466	4,902	7,040	4,524	481
1926	1,213	386,460	52,272	6,303	6,820	7,560	6,325	681
1927	861	485,683	53,626	5,168	5,733	10,146	7,368	761
1928***	834	475,230	42,642	5,150	4,202	7,840	10,545	734

*** Subject to revision.

N.B. Figures underscored are census figures. All others are estimates made by the U. S. Department of Agriculture.

TABLE XVII (Ch. VI)*

LIVESTOCK ON FARMS IN NORTH CAROLINA, 1867-1929

The following table is compiled from the U. S. Census records and estimates of the U. S. Department of Agriculture. Measured on a per farm basis, livestock has grown less and less important, as crops have grown more and more important.

JAN. 1	FARMS NUMBER	HORSES No. THOUSANDS	MULES No. THOUSANDS	MILK COWS No. THOUSANDS	OTHER CATTLE No. THOUSANDS	SHEEP No. THOUSANDS	SWINE No. THOUSANDS
1867	......	99	33	204	293	339	1,161
1868	......	98	33	204	287	326	975
1869	......	98	34	206	281	296	858
1870**	93,565	103	51	197	324	463	1,075
1871	......	127	44	203	298	315	842
1872	......	130	46	205	307	296	875
1873	......	132	48	201	316	293	849
1874	......	132	48	199	316	279	823
1875	......	133	49	197	310	276	807
1876	......	140	52	201	313	284	758
1877	......	141	53	203	316	281	736
1878	......	142	55	230	420	490	1,180
1879	......	145	74	232	416	425	1,263
1880**	157,609	134	82	232	425	462	1,454
1881	......	147	75	230	407	386	1,237
1882	......	134	82	230	430	471	1,381
1883	......	136	82	237	428	466	1,312
1884	......	137	85	234	420	452	1,364
1885	......	141	86	241	428	488	1,433
1886	......	143	86	239	424	469	1,347
1887	......	143	88	241	419	450	1,279
1888	......	150	90	244	419	428	1,266
1889	......	151	91	247	419	419	1,279
1890**	178,359	131	99	223	407	402	1,251
1891	......	147	98	267	390	398	1,292
1892	......	132	100	269	390	390	1,253
1893	......	133	100	272	383	396	1,259
1894	......	135	110	275	386	376	1,335
1895	......	140	110	275	379	357	1,442
1896	......	144	111	272	364	343	1,427
1897	......	146	111	267	345	319	1,456
1898	......	147	113	259	321	290	1,427
1899	......	147	111	248	296	261	1,370
1900**	224,637	159	136	233	391	302	1,300
1901	......	167	138	214	356	279	1,302
1902	......	164	137	206	327	245	1,094
1903	......	162	138	201	308	221	1,017
1904	......	161	139	197	299	203	1,048
1905	......	164	142	193	302	209	1,058
1906	......	180	166	259	437	220	1,153

* Compiled for the author by Miss H. R. Smedes.

** Census, June 1.

TABLE XVII (Ch. VI) *Continued*

Jan. 1	Farms Number	Horses No. Thousands	Mules No. Thousands	Milk Cows No. Thousands	Other Cattle No. Thousands	Sheep No. Thousands	Swine No. Thousands
1907	......	186	175	283	446	224	1,292
1908	......	190	177	294	450	220	1,357
1909	......	192	179	294	454	222	1,398
1910***	253,725	166	175	309	392	214	1,228
1911	......	168	178	312	388	203	1,351
1912	......	173	182	312	380	193	1,405
1913	......	176	186	312	372	181	1,335
1914	......	180	192	309	365	177	1,362
1915	......	182	194	315	369	177	1,525
1916	......	185	200	321	375	155	1,550
1917	......	185	205	315	364	140	1,450
1918	......	187	210	309	375	137	1,400
1919	......	181	225	315	379	138	1,546
1920†	269,763	171	257	354	291	91	1,271
1921	......	163	260	306	364	95	1,246
1922	......	155	264	312	288	86	1,186
1923	......	147	268	309	271	80	1,100
1924	......	138	273	306	256	70	1,020
1925†	283,482	131	280	312‡	233‡	67	872
1926	......	120	276	303	220	73	832
1927	......	112	279	297	189	80	849
1928	......	105	279	294	202	85	951
1929†††	......	98	276	294	212	89	874

*** Census, April 15. † Census, Jan. 1.
‡ Dept. of Agriculture estimate. ††† Subject to revision.

N.B. Figures underlined are census figures. All others are estimates made by the U. S. Department of Agriculture.

LIVESTOCK PER FARM IN NORTH CAROLINA, 1870-1929

Year	Horses	Mules	Milk Cows	Other Cattle	Sheep	Swine
1870	1.10	0.54	2.11	3.46	4.95	10.76
1180	0.85	0.52	1.47	2.69	2.93	9.24
1890	0.74	0.55	1.25	2.28	2.73	7.02
1900	0.71	0.61	1.04	1.74	1.34	5.79
1910	0.65	0.69	1.22	1.54	0.84	4.84
1920	0.63	0.95	1.31	1.08	0.34	4.73
1925	0.46	0.99	1.10	0.82	0.24	3.07
1929[a]	0.24	0.95	1.01	0.73	0.36	3.01

[a] Farms estimated at 290,000.

TABLE XVIII (Ch. VI)

BRIEF SUMMARY OF NORTH CAROLINA'S RANK AGRICULTURALLY

Rank	Item	Figure
2	Farms, 1925	283,495
2	Farm population, 1929 estimate	1,600,000
3	Increase in farms, 1920-1925	13,732
48	Cultivated acres per farm, 1925	19.6
48	Improved acres per farm dweller	5.5
39	Per cent of farms operated by tenants, 1925	45.2
1	Increase in farm tenancy, 1910-25	20,967
1	Increase in Negro farmers, 1910-25	15,310
6	Negro farmers	80,906
7	Value of all crops, 1927	$361,000,000
1	Value of tobacco crop, 1927	$107,000,000
7	Cotton and cotton seed, value, 1927	$97,000,000
15	Corn crop value, 1927	$49,000,000
21	Value of animal products, 1926	$92,000,000
40	Value of all farm products per farm, 1925	$1,560
47	Value of livestock per farm, 1920	$442
44	Per cent lightly stocked, 1920	31
48	Meat and milk animal units per farm, 1925	2.38
46	Dairy cows, two years old and over, per farm, 1925	.83
48	All cattle per farm, 1925	1.90
46	Per cent farms having pure-bred livestock, 1920	3.90
35	Per cent self-feeding, 1920	52
41	Value of farm property per farm, 1925	$3,704
43	Value of buildings per farm, 1920	$811
44	Value of farm machinery per farm, 1920	$202

TABLE XIX (Ch. VII)*

FARM TENANCY IN THE UNITED STATES, 1920 AND 1925

During the five-year period, 1920-25, North Carolina's net increase in the number of farms operated by tenants was surpassed by only two states, Texas and Oklahoma.

Rank	States	Per Cent Tenants		Rank	States	Per Cent Tenants	
		1925	1920			1925	1920
1	Maine	3.4	4.2	25	Ohio	25.5	29.5
2	New Hampshire	4.8	6.7	26	Maryland	26.4	28.9
3	Massachusetts	4.8	7.1	27	Minnesota	27.1	24.7
4	Connecticut	6.4	8.5	28	Indiana	29.2	32.0
5	Nevada	7.8	9.4	29	Colorado	30.9	23.0
6	Vermont	9.3	11.6	30	Kentucky	32.0	33.4
7	Utah	11.1	10.9	31	Missouri	32.6	28.8
8	Rhode Island	12.1	15.5	32	North Dakota	34.4	25.6
9	New York	14.1	19.2	33	Delaware	35.8	39.3
10	California	14.7	21.4	34	Tennessee	41.0	41.1
11	Michigan	15.1	17.7	35	South Dakota	41.5	34.9
12	Wisconsin	15.5	14.4	36	Illinois	42.0	42.7
13	New Jersey	15.9	23.0	37	Kansas	42.2	40.4
14	Washington	16.3	18.7	38	Iowa	44.7	41.7
14	West Virginia	16.3	16.2	*39*	*North Carolina*	*45.2*	*43.5*
16	Oregon	16.8	18.8	40	Nebraska	46.4	42.9
17	New Mexico	17.1	12.2	41	Arkansas	56.7	51.3
18	Pennsylvania	17.4	21.9	42	Oklahoma	58.6	51.0
19	Wyoming	17.9	12.5	43	Louisiana	60.1	57.1
20	Florida	21.3	25.3	44	Texas	60.4	53.3
21	Arizona	21.6	18.1	45	Alabama	60.7	57.9
22	Montana	21.9	11.3	46	Georgia	63.8	66.1
23	Idaho	24.4	15.9	47	South Carolina	65.1	64.5
24	Virginia	25.2	25.6	48	Mississippi	68.3	66.1

FARM TENANCY BY GEOGRAPHIC DIVISIONS

Geographic Division	Per Cent Tenants		Geographic Division	Per Cent Tenants	
	1925	1920		1925	1920
New England	5.6	7.4	W. N. Central	37.8	34.2
Pacific	15.6	20.1	South Atlantic	44.5	46.8
Middle Atlantic	15.8	20.7	E. S. Central	50.3	49.7
Rocky Mountain	22.2	15.4	W. S. Central	59.2	52.9
E. N. Central	26.0	28.1			

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* *News Letter,* vol. XII, no. 30. Based on farm census of 1925.

TABLE XX (Ch. VII)*

PERCENTAGE OF NEGRO FARMERS WHO OWNED THEIR FARMS
1920

State average 29.2 per cent of Negro Farmers owning their farms. Where Negroes are concentrated, tenancy is the rule; where Negroes are relatively few, ownership is the rule.

Rank	County	Per Cent Owners	Rank	County	Per Cent Owners
1	Dare	100.0	44	Chatham	40.6
1	Mitchell	100.0	45	Orange	40.5
3	Transylvania	93.8	46	Onslow	40.2
4	Graham	92.3	47	Lee	40.0
5	Swain	92.0	48	Person	39.8
6	Jackson	89.0	49	Stanly	39.4
7	Ashe	88.9	50	Rowan	39.0
7	Cherokee	88.9	51	Rutherford	38.8
9	Alleghany	81.6	52	Warren	38.3
10	Brunswick	81.0	53	Craven	38.2
11	Wilkes	78.3	54	Pasquotank	37.3
12	Caldwell	78.1	55	Cumberland	35.9
12	Avery	78.1	56	Stokes	35.7
14	Randolph	77.9	57	Chowan	35.8
15	Watauga	76.9	58	Pamlico	34.4
16	New Hanover	76.6	59	Martin	34.1
17	Henderson	75.7	60	Lincoln	34.0
18	Burke	75.5	61	Duplin	33.7
19	Columbus	74.1	62	Vance	33.6
20	McDowell	71.4	63	Washington	33.3
21	Pender	68.0	63	Madison	33.3
22	Surry	63.7	65	Harnett	33.1
22	Macon	63.7	65	Perquimans	33.1
24	Bladen	62.5	67	Iredell	32.1
24	Haywood	62.5	68	Granville	30.9
26	Buncombe	61.2	69	Bertie	30.6
27	Guilford	57.6	70	Rockingham	30.2
28	Forsyth	57.5	70	Montgomery	30.2
29	Tyrrell	56.3	72	Hertford	28.0
30	Yadkin	56.2	73	Polk	27.5
31	Carteret	55.2	74	Caswell	27.4
32	Clay	55.0	75	Hyde	27.1
33	Yancey	53.1	76	Wake	25.8
34	Currituck	51.3	77	Durham	24.3
35	Moore	50.9	78	Robeson	24.0
36	Davie	50.7	79	Halifax	23.9
37	Gates	48.7	80	Johnston	23.7
38	Alamance	47.2	81	Gaston	23.0
39	Beaufort	45.7	81	Northampton	23.0
40	Alexander	45.4	83	Camden	22.2
41	Catawba	43.3	84	Richmond	22.1
42	Sampson	42.9	85	Nash	21.1
43	Davidson	41.8	86	Jones	19.4

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* *News Letter,* vol. IX, no. 27.

TABLE XX (Ch. VII) *Continued*

RANK	COUNTY	PER CENT OWNERS	RANK	COUNTY	PER CENT OWNERS
87	Franklin	19.2	94	Pitt	11.2
88	Hoke	18.4	95	Scotland	10.1
89	Cleveland	17.9	96	Greene	9.6
90	Wayne	17.3	97	Mecklenburg	9.1
91	Anson	15.8	98	Wilson	7.9
92	Union	13.9	98	Lenoir	7.9
93	Cabarrus	13.8	100	Edgecombe	6.6

TABLE XXI (Ch. VIII)

INDUSTRY IN NORTH CAROLINA, 1927

Rank	County	Number Estabs.	Wage Earners	Wages Paid (000 Omitted)	Value Added by Manuf.	Total Value of Output
1	Forsyth	103	18,712	$15,097	$200,175,719	$302,571,980
2	Durham	62	8,846	6,041	69,894,584	106,865,989
3	Guilford	200	16,554	14,458	33,587,971	79,768,852
4	Rockingham	38	5,917	5,030	46,857,812	69,434,742
5	Gaston	125	18,008	13,155	23,910,352	63,425,280
6	Mecklenburg	150	8,122	8,014	19,367,888	52,851,356
7	Alamance	86	6,227	4,637	10,094,508	25,015,180
8	Rowan	64	5,860	5,337	9,760,642	21,574,417
9	Davidson	69	5,564	4,478	8,443,196	20,389,086
10	Buncombe	89	3,494	3,779	9,012,132	19,283,135
11	Catawba	89	5,437	3,594	7,416,750	17,040,001
12	Rutherford	37	4,193	3,081	6,696,479	16,349,311
13	Iredell	67	3,816	3,035	6,505,016	15,839,054
14	Cleveland	52	4,234	3,052	5,892,592	15,366,573
15	Caldwell	66	3,469	2,258	5,388,484	13,311,301
16	Burke	31	3,431	1,901	4,331,971	12,935,268
17	Halifax	41	3,154	2,419	6,477,664	12,759,813
18	Haywood	28	2,228	2,264	4,814,485	12,197,180
19	New Hanover	60	2,295	2,301	4,839,756	11,912,234
20	Richmond	33	3,341	2,612	4,700,771	10,915,158
21	Wake	69	2,503	2,405	5,126,724	10,566,025
22	Randolph	61	2,656	1,737	3,628,185	9,545,674
23	Surry	45	2,875	2,389	4,269,743	8,890,227
24	Edgecombe	36	2,313	2,471	3,401,260	8,871,238
25	Harnett	33	2,169	1,495	3,824,411	8,673,420
26	McDowell	25	2,495	1,563	3,224,396	8,001,835
27	Wayne	44	1,994	1,533	3,291,023	7,897,469
28	Vance	20	1,839	1,092	2,399,069	7,461,980
29	Cumberland	40	2,155	1,265	2,771,084	7,064,824
30	Robeson	38	2,087	1,137	2,207,390	6,069,527
31	Wilkes	40	1,248	786	2,153,509	5,981,178
32	Lincoln	32	1,794	1,225	2,057,950	5,425,726
33	Craven	39	2,168	1,500	2,646,641	5,357,321
34	Scotland	21	1,004	691	1,640,404	5,129,979
35	Chowan	15	653	304	922,320	4,205,519
36	Johnston	31	1,021	640	1,444,428	4,200,628
37	Beaufort	32	1,174	849	1,885,517	4,106,008
38	Union	27	922	634	1,459,530	3,962,452
39	Wilson	16	555	456	1,208,680	3,918,461
40	Pasquotank	36	1,229	950	1,871,801	3,710,086
41	Columbus	25	1,735	1,114	1,768,858	3,598,173
42	Anson	20	775	530	1,105,480	3,382,678
43	Nash	22	860	591	1,384,956	3,364,694
44	Jackson	21	991	771	1,372,628	3,258,191
45	Henderson	26	1,112	721	1,479,631	3,061,575
46	Orange	18	1,131	771	1,326,715	3,005,719
47	Bladen	21	1,128	632	1,170,617	2,858,560

TABLE XXI (Ch. VIII) *Continued*

Rank	County	Number Estabs.	Wage Earners	Wages Paid (000 Omitted)	Value Added by Manuf.	Total Value of Output
48	Montgomery	21	771	$ 522	$ 967,347	$ 2,709,063
49	Chatham	34	834	494	1,030,306	2,595,089
50	Lenoir	29	619	394	866,832	2,463,252
51	Alexander	19	798	487	1,000,587	2,442,296
52	Lee	28	625	484	1,041,100	2,402,907
53	Pitt	29	492	385	782,976	2,378,864
54	Franklin	13	653	437	751,575	2,329,558
55	Cherokee	10	526	304	765,467	1,769,946
56	Perquimans	7	318	251	562,345	1,761,621
57	Polk	14	399	250	593,961	1,679,307
58	Moore	34	485	330	755,397	1,504,030
59	Granville	22	365	263	575,466	1,402,746
60	Swain	7	587	514	857,561	1,254,115
61	Brunswick	13	235	191	470,732	1,227,102
62	Duplin	15	649	459	818,093	1,120,584
63	Sampson	21	475	201	548,541	1,012,379
64	Carteret	21	188	168	620,438	995,446
65	Mitchell	16	308	250	698,930	979,788
66	Hoke	9	471	127	259,116	881,828
67	Warren	20	270	148	352,460	846,260
68	Bertie	14	394	233	403,311	748,482
69	Pender	13	478	272	371,482	573,683
70	Stokes	11	107	91	356,173	513,554
71	Graham	5	210	245	355,332	438,409
72	Macon	12	129	113	288,880	408,444
73	Hertford	10	194	168	202,530	377,948
74	Avery	9	123	92	219,946	330,529
75	Onslow	5	128	102	197,992	294,046
76	Yadkin	12	52	32	106,644	291,835
77	Gates	4	231	127	178,245	276,729
78	Northampton	6	277	119	190,204	273,582
79	Madison	7	85	56	101,205	259,989
80	Ashe	12	108	72	169,282	252,862
81	Yancey	11	101	48	126,058	249,662
82	Jones	4	78	53	130,088	241,264
83	Martin	9	49	28	94,733	173,308
84	Watauga	8	62	30	66,428	83,687
85	Tyrrell	4	28	12	21,785	52,968
86	Greene	3	24	10	35,980	50,540
87	Clay	4	26	12	28,510	36,010
	Total	3,008	204,767	$158,287	$592,531,353	$1,154,617,636

Data for the following counties cannot be given without disclosing the facts for a single industry: Cabarrus, Dare, Davie, Pamlico, Person, Stanly, Transylvania, Washington, Alleghany, Caswell, Currituck. Cabarrus and Stanly are important industrial counties. No industry is listed in either Camden or Hyde counties. Total includes counties omitted from the table. Data for the table compiled from U. S. Census of Industry, 1927.

TABLE XXII (Ch. IX)*

BANK RESOURCES IN UNITED STATES, 1927

The report covers national, state (commercial) banks, loan and trust companies, savings and private banks. There are 27,061 banks in the United States with aggregate resources of $68,132,558,000. This is an average of $574 per capita, using estimated population in 1927. North Carolina has 540 banks.

Rank	State	Bank Resources		Rank	State	Bank Resources	
		Aggregate (000 omitted)	Per Capita			Aggregate (000 omitted)	Per Capita
1	New York	$18,894,762	$1,654	25	Utah	$ 175,893	$336
2	Massachusetts	4,911,842	1,157	26	Washington	520,146	333
3	California	3,833,958	858	27	Colorado	337,856	315
4	Rhode Island	571,441	812	28	New Mexico	41,297	297
5	Connecticut	1,320,034	807	29	Kansas	541,455	296
6	Vermont	261,716	744	30	Wyoming	68,419	284
7	New Jersey	2,619,291	699	31	Louisiana	529,314	274
8	Pennsylvania	6,512,856	669	32	West Virginia	452,494	267
9	New Hampshire	304,088	668	33	Virginia	671,672	264
10	Nevada	46,529	643	34	North Dakota	165,726	258
11	Illinois	4,617,864	633	35	Texas	1,314,162	244
12	Delaware	151,230	622	36	Montana	170,389	238
13	Maine	466,694	589	37	Kentucky	591,418	233
13	Maryland	941,067	589	38	South Dakota	158,640	228
15	Michigan	2,267,854	506	39	Oklahoma	521,251	219
16	Ohio	3,238,029	485	40	Tennessee	526,826	212
17	Missouri	1,601,480	456	41	Idaho	97,503	184
18	Iowa	1,024,005	422	42	Arizona	82,804	180
19	Minnesota	1,129,048	420	*43*	*North Carolina*	*503,958*	*174*
20	Florida	562,565	415	44	Mississippi	276,588	154
21	Nebraska	541,422	388	45	Georgia	462,843	146
22	Indiana	1,200,393	381	46	Arkansas	268,903	140
23	Wisconsin	1,100,626	377	47	Alabama	349,241	137
24	Oregon	326,755	367	48	South Carolina	234,841	127

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* *News Letter,* vol. XIV, no. 16.

TABLE XXIII (Ch. IX)*

BANK RESOURCES PER INHABITANT, 1925

Aggregate bank resources in North Carolina in 1925 were $488,514,207, or $181.75 per inhabitant. The aggregate in 1914 was $153,114,436, or $64.90 per inhabitant.

U. S. total of bank resources $62,275,000,000, or $558 per inhabitant.

Rank	County	Bank Resources	
		Aggregate (000 Omitted)	Per Inhab.
1	Mecklenburg	$50,790	$590.30
2	New Hanover	25,764	589.75
3	Forsyth	49,261	560.00
4	Durham	23,003	510.45
5	Guilford	40,297	468.00
6	Pasquotank	7,543	443.50
7	Moore	7,175	312.45
8	Gaston	16,655	293.80
9	Wake	23,107	290.90
10	Vance	5,859	248.08
11	Buncombe	16,449	237.30
12	Edgecombe	9,459	235.45
13	Scotland	3,640	232.20
14	Cleveland	8,002	222.18
15	Henderson	4,026	212.00
16	Wilson	8,445	211.70
17	Chowan	2,167	203.40
18	Wayne	9,266	200.40
19	Cabarrus	6,291	172.50
20	Craven	5,570	167.93
21	Rutherford	5,437	167.20
22	Catawba	5,874	163.20
23	Hertford	2,590	156.00
24	Lenoir	4,974	155.45
25	Granville	4,012	146.00
26	Richmond	4,007	144.60
27	Lincoln	2,586	142.55
28	Beaufort	4,362	140.04
29	Cumberland	5,099	138.37
30	Pitt	6,503	133.10
31	Transylvania	1,313	130.03
32	Halifax	5,919	128.75
33	Anson	3,775	128.55
34	Iredell	5,027	128.10
35	Surry	4,252	127.12
36	Davidson	4,726	126.75
37	Alamance	3,928	115.00
38	Rockingham	5,271	112.25
39	Person	2,193	112.10
40	Bertie	4,362	111.53
41	Franklin	2,959	108.20
42	Orange	1,972	104.23
43	Stokes	$2,127	$102.55
44	Randolph	3,147	100.03
45	Montgomery	1,447	99.00
46	Gates	1,046	98.85
47	McDowell	1,768	98.70
48	Burke	2,322	96.90
49	Carteret	1,617	96.07
50	Caldwell	1,947	95.18
51	Robeson	5,224	90.92
52	Johnston	4,592	88.80
53	Haywood	2,153	88.18
54	Polk	791	85.45
55	Nash	3,718	85.10
56	Duplin	2,678	83.80
57	Lee	1,181	83.60
58	Martin	1,779	81.17
59	Watauga	1,085	78.86
60	Harnett	2,396	78.50
61	Cherokee	1,086	75.95
62	Northampton	1,754	74.71
63	Union	2,687	72.58
64	Mitchell	819	70.90
65	Onslow	1,046	70.17
66	Rowan	3,229	69.57
67	Madison	1,306	65.00
68	Davie	879	64.42
69	Columbus	1,851	59.95
70	Wilkes	1,945	58.09
71	Macon	741	56.20
72	Alexander	711	55.22
73	Swain	980	54.38
74	Yancey	869	53.66
75	Perquimans	595	53.28
76	Stanly	1,602	53.17
77	Jackson	673	49.72
78	Sampson	1,856	48.65
79	Avery	490	46.33
80	Warren	1,014	45.95
81	Chatham	1,086	44.60
82	Ashe	910	41.90
83	Hyde	349	41.66
84	Greene	632	36.44

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* *News Letter,* vol. XII, no. 26.

TABLE XXIII (Ch. IX) *Continued*

Rank	County	Bank Resources Aggregate (000 Omitted)	Bank Resources Per Inhab.	Rank	County	Bank Resources Aggregate (000 Omitted)	Bank Resources Per Inhab.
85	Hoke	$427	$34.64	93	Clay	$ 91	$18.53
86	Bladen	661	32.44	94	Washington	196	16.98
87	Dare	168	32.20	95	Brunswick	240	15.95
88	Pender	440	29.73	96	Caswell	207	12.92
89	Currituck	195	26.80	97	Camden	...	....
90	Yadkin	430	25.66	98	Graham**	...	....
91	Alleghany	185	25.00	99	Pamlico**	...	....
92	Jones	121	19.40	100	Tyrrell	...	....

** No report.

TABLE XXIV (Ch. X)*

INHABITANTS PER MOTOR CAR, AUGUST 1, 1928

State total of motor cars on August 1, 1928, was 440,258. Passenger cars numbered 396,295, trucks 43,963. State average, one car for every 6.6 inhabitants.

Rank	County	Number Motor Cars	Inhabs. Per Car
1	Guilford	24,660	3.8
2	Mecklenburg	23,555	3.9
3	Buncombe	16,255	4.7
3	Davidson	8,575	4.7
5	Durham	10,075	4.8
6	Rowan	10,300	4.9
7	Catawba	7,635	5.1
8	Lincoln	3,575	5.2
8	Wake	16,675	5.2
10	Iredell	7,625	5.4
11	Forsyth	19,205	5.5
11	Moore	4,660	5.5
11	Randolph	5,975	5.5
14	Cabarrus	7,100	5.7
14	Cleveland	6,800	5.7
14	Davie	2,400	5.7
14	Henderson	3,550	5.7
18	Gaston	11,375	5.8
18	Montgomery	2,535	5.8
18	Alamance	6,300	5.8
21	Lee	2,575	5.9
21	Wilson	7,600	5.9
23	Pasquotank	3,025	6.1
24	Chowan	1,775	6.2
25	Union	5,875	6.5
25	Edgecombe	6,650	6.5
27	Orange	3,100	6.6
27	Pitt	8,200	6.6
27	Camden	860	6.6
27	Harnett	5,125	6.6
31	Scotland	2,350	6.7
32	Stokes	3,050	6.8
32	Rockingham	7,405	6.8
32	Lenoir	5,200	6.8
35	Nash	6,900	6.9
35	Rutherford	4,975	6.9
35	Surry	4,975	6.9
35	Beaufort	4,515	6.9
35	Currituck	1,075	6.9
40	Wayne	7,300	7.0
40	Perquimans	1,600	7.0
42	Yadkin	2,440	7.1
42	Richmond	4,400	7.1
42	New Hanover	6,600	7.1
42	Bertie	3,500	7.1
46	Stanly	4,825	7.2
47	Johnston	7,635	7.3
47	Granville	3,895	7.3
47	Caldwell	2,925	7.3
50	Cumberland	5,325	7.4
50	Duplin	4,675	7.4
52	Chatham	3,325	7.5
53	Franklin	3,625	7.8
53	Person	2,660	7.8
55	Northampton	3,200	7.9
55	Alexander	1,605	7.9
57	Craven	4,050	8.0
58	Vance	3,600	8.1
58	Martin	2,945	8.1
60	Burke	3,010	8.3
60	Gates	1,275	8.3
60	Hertford	2,050	8.3
60	Sampson	5,000	8.3
64	Tyrrell	600	8.5
65	Polk	1,160	8.6
65	Halifax	5,735	8.6
67	Greene	2,275	8.8
67	Onslow	1,705	8.8
67	Pender	1,710	8.8
70	Pamlico	1,050	8.9
71	Washington	1,290	9.1
71	Haywood	2,825	9.1
71	Columbus	3,555	9.1
74	Caswell	1,800	9.2
74	Warren	2,475	9.2
76	McDowell	2,105	9.4
77	Hoke	1,375	9.7
78	Robeson	6,400	9.8
79	Jones	1,075	10.3
80	Transylvania	1,080	10.5
81	Anson	2,920	10.6
82	Clay	310	10.8
83	Wilkes	3,050	11.1
84	Alleghany	700	11.4
85	Bladen	1,850	11.6
86	Carteret	1,435	11.8

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* *News Letter,* vol. XIV, no. 46.

TABLE XXIV (Ch. X) *Continued*

Rank	County	Number Motor Cars	Inhabs. Per Car	Rank	County	Number Motor Cars	Inhabs. Per Car
87	Jackson	1,135	12.1	94	Cherokee	1,035	15.7
87	Watauga	1,175	12.1	95	Mitchell	740	16.2
89	Hyde	700	12.3	96	Dare	298	18.0
90	Brunswick	1,200	12.7	97	Ashe	1,070	21.4
91	Macon	995	13.6	98	Graham	230	21.6
92	Avery	735	14.9	99	Swain	615	25.9
93	Madison	1,285	15.5	100	Yancey	675	26.7

TABLE XXV (Ch. XI)*

WEALTH INCREASE IN U. S., 1912-23

And Wealth Per Inhabitant December 31, 1922

The estimated total wealth of North Carolina in 1912 was $1,647,781,000, and on December 31, 1922, it was $4,543,110,000, an increase in total wealth of 175.7 per cent.

Wealth per inhabitant in North Carolina increased from $724 in 1912 to $1,703 at the beginning of 1923. The per inhabitant wealth in North Carolina in 1912 was $724, and only Mississippi was below us. Our per inhabitant wealth at the end of 1922 was $1,703, and six states ranked below us. Our per inhabitant wealth is still small but it has been increasing faster than that of any other state.**

Rank	State	Per Capita Value Dec. 31, 1922	Per Cent Increase Per Capita	Rank	State	Per Capita Value Dec. 31, 1922	Per Cent Increase Per Capita
1	North Carolina	$1,703	135.2	25	Wisconsin	$2,287	61.5
2	Tennessee	1,773	113.6	26	Michigan	2,883	59.6
3	South Dakota	4,482	112.9	27	Maryland	2,665	59.4
4	Idaho	3,301	109.3	28	New Jersey	3,524	58.7
5	Wyoming	4,663	109.1	29	Pennsylvania	3,187	58.6
6	New Hampshire	3,074	105.6	30	Indiana	2,942	52.2
7	Florida	2,341	103.9	31	Kentucky	1,459	51.5
8	Maine	2,586	94.1	32	Oregon	4,182	50.4
9	Mississippi	1,216	87.1	33	Washington	3,600	46.6
10	Delaware	2,744	86.2	34	Nevada	6,998	40.7
11	Virginia	2,050	82.7	35	Alabama	1,244	38.8
12	Massachusetts	3,243	80.4	36	Arkansas	1,439	38.6
13	Rhode Island	3,086	80.3	37	Minnesota	3,444	37.4
14	Connecticut	3,610	78.7	38	Kansas	3,492	33.7
15	South Carolina	1,385	74.2	39	Montana	3,691	33.5
16	Arizona	3,511	72.9	40	Nebraska	4,004	32.4
17	Missouri	2,903	71.8	41	New York	3,431	30.6
18	New Jersey	2,384	71.6	42	Texas	2,010	30.4
19	New Mexico	2,299	67.9	43	Illinois	3,295	25.4
20	Georgia	1,306	66.3	44	Iowa	4,274	24.1
21	Ohio	3,045	65.7	45	Colorado	3,285	22.8
22	Utah	3,247	63.0	46	California	4,007	22.3
23	Louisiana	1,855	62.9	47	North Dakota	3,692	11.2
24	West Virginia	3,040	61.8		Oklahoma omitted for lack of data		

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* *News Letter,* vol. X, no. 20. Based on U. S. Dept. of Commerce Studies.

** The estimated true wealth for 1927 was $4,883,000,000.

TABLE XXVI (Ch. XI)*

INDIVIDUAL INCOME TAXPAYERS, 1926

For North Carolina 35,332 individuals filed federal income tax returns, but only 16,058 individuals actually paid a federal income tax. Specific exemptions exceeded net income for 19,274 individuals who filed returns but paid no tax.

North Carolina has 2.45 per cent of the nation's population, but we filed .85 of one per cent of the individual income tax returns, we reported .70 of one per cent of the net income reported, and we paid .46 of one per cent of the federal income tax paid by individuals.

Rank	State	Per Cent of Population Filing Returns	Rank	State	Per Cent of Population Filing Returns
1	California	7.31	25	Vermont	2.45
2	New York	6.66	26	Minnesota	2.42
3	Nevada	6.20	26	Nebraska	2.42
4	Massachusetts	5.34	28	Arizona	2.36
5	Illinois	5.20	29	Montana	2.33
6	Connecticut	5.07	30	Idaho	2.23
7	New Jersey	4.70	31	Texas	2.10
8	Florida	4.26	32	Iowa	2.04
9	Maryland	4.25	33	Louisiana	2.03
10	Pennsylvania	4.14	34	West Virginia	1.95
11	Michigan	4.02	35	Kansas	1.80
12	Washington	3.89	35	South Dakota	1.80
13	Delaware	3.88	37	New Mexico	1.68
14	Rhode Island	3.80	38	Oklahoma	1.60
15	Wyoming	3.78	39	North Dakota	1.54
16	Oregon	3.53	40	Virginia	1.50
17	Ohio	3.50	41	Tennessee	1.44
18	Wisconsin	3.44	42	Kentucky	1.30
19	New Hampshire	3.36	43	North Carolina	1.24
20	Colorado	3.32	44	Georgia	1.17
21	Missouri	2.84	45	Alabama	1.13
22	Utah	2.64	46	Arkansas	1.02
23	Maine	2.49	47	Mississippi	.96
24	Indiana	2.47	48	South Carolina	.76

* *News Letter,* vol. XV, no. 7. Based on U. S. Statistics of Income.

TABLE XXVII (Ch. XI)*

ASSESSED VALUATIONS, 1926

The total taxed wealth of the state in 1926 was $2,798,293,601, or $980 per capita.

Rank	County	Assessed Valuations 1926	Taxables Per Capita	Rank	County	Assessed Valuations 1926	Taxables Per Capita
1	Buncombe	$146,420,354	$1,938	44	Swain	$12,532,024	$ 816
2	Mecklenburg	168,598,107	1,863	45	Edgecombe	34,374,906	814
3	Guilford	168,932,839	1,796	45	Hoke	10,464,627	814
4	Durham	88,828,568	1,775	47	Jackson	11,017,446	808
5	Forsyth	178,709,494	1,675	48	Currituck	5,853,186	805
6	Gaston	91,582,199	1,453	49	Johnston	44,056,937	804
7	Henderson	25,255,427	1,290	49	Cumberland	30,913,793	804
8	New Hanover	57,758,863	1,225	51	Tyrrell	3,892,039	802
9	Rowan	56,891,944	1,168	52	Carteret	13,104,431	796
10	Wake	95,294,055	1,142	53	Transylvania	8,635,972	792
11	Iredell	45,722,202	1,135	54	Mitchell	9,233,625	786
12	McDowell	20,791,603	1,085	55	Harnett	25,830,345	783
13	Wilson	46,555,603	1,070	56	Chatham	18,789,780	765
14	Scotland	16,824,865	1,068	57	Granville	21,181,528	758
15	Burke	26,202,341	1,067	58	Duplin	25,481,292	757
16	Richmond	31,279,515	1,066	59	Polk	7,282,942	754
17	Montgomery	15,250,903	1,043	60	Washington	8,677,437	744
18	Moore	25,706,496	1,042	60	Robeson	44,671,774	744
19	Pasquotank	18,938,566	1,035	62	Anson	22,352,339	739
20	Catawba	39,228,192	1,027	63	Person	14,687,970	734
21	Caldwell	21,414,407	1,026	64	Onslow	10,976,775	730
22	Rutherford	34,240,555	1,024	64	Greene	13,514,683	730
23	Wayne	49,120,813	994	66	Pender	10,486,330	709
24	Cleveland	37,242,127	992	67	Perquimans	7,899,391	706
25	Pitt	50,907,072	970	68	Nash	32,631,141	704
26	Chowan	10,187,078	956	69	Martin	16,029,910	698
27	Cabarrus	37,964,229	953	70	Gates	7,333,790	692
28	Lee	13,950,314	940	71	Hyde	5,746,041	686
29	Craven	29,181,949	930	72	Hertford	11,219,405	668
30	Rockingham	42,191,882	919	73	Jones	7,061,552	658
31	Beaufort	28,583,274	918	74	Bladen	13,632,762	653
32	Alamance	32,220,947	907	75	Columbus	20,166,643	651
33	Davie	12,368,231	904	76	Randolph	20,566,515	650
34	Stanly	30,362,246	902	77	Camden	3,462,422	643
35	Graham	4,448,646	900	78	Union	24,705,011	640
36	Davidson	35,203,509	894	79	Alexander	8,000,096	635
37	Orange	17,447,612	876	80	Warren	14,203,545	633
38	Lincoln	15,311,051	836	81	Alleghany	4,613,641	624
38	Vance	21,617,604	836	82	Northampton	14,739,413	621
40	Halifax	39,961,708	832	83	Watauga	8,696,581	616
41	Surry	28,431,661	830	84	Bertie	15,220,915	614
42	Lenoir	28,827,573	828	85	Stokes	12,630,807	606
43	Haywood	20,405,808	818	86	Pamlico	5,465,972	604

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* *News Letter,* vol. XIV, no. 10.

TABLE XXVII (Ch. XI) *Continued*

Rank	County	Assessed Valuations 1926	Taxables Per Capita	Rank	County	Assessed Valuations 1926	Taxables Per Capita
87	Brunswick	$ 8,956,226	$ 591	94	Madison	$10,198,704	$ 510
88	Sampson	23,003,407	571	95	Franklin	14,228,098	509
89	Yadkin	9,401,048	553	96	Dare	2,614,283	494
90	Cherokee	8,524,402	534	97	Macon	6,308,733	476
91	Caswell	8,592,969	526	98	Yancey	8,021,460	462
92	Ashe	11,686,885	524	99	Wilkes	15,524,928	454
93	Avery	5,591,774	519	100	Clay	2,240,518	436

TABLE XXVIII (Ch. XI)*

ASSESSMENTS AND TAXES IN NORTH CAROLINA, 1927-28

The total amount of county and district taxes levied in the state in 1927-28 was $45,695,731, and the assessed valuation was $2,934,011,733. Hence the average tax rate on a hundred dollars of property was $1.56, though in only 29 counties was the average rate as low as this.

Rank	County	Assessed Valuation 1927	Total Tax Levy 1927-28	County-wide Rate	Average County and District Rate
1	Forsyth	$198,555,211	$1,379,014	$ .60	$ .69
2	Guilford	192,823,410	1,961,551	.98	1.01
2	Cabarrus	45,697,747	460,761	.95	1.01
4	Durham	95,151,761	1,018,908	1.04	1.07
5	Scotland	16,250,641	314,830	1.33½	1.09
6	Mecklenburg	173,054,390	1,910,956	.95	1.10
7	Rowan	70,586,577	783,299	.94	1.11
8	Randolph	27,446,362	325,558	1.00	1.19
9	Alleghany	4,893,059	59,814	1.10	1.22
10	Gaston	95,994,257	1,179,073	1.00	1.23
11	Surry	29,877,583	383,633	1.15	1.28
12	Burke	24,355,009	313,751	1.00	1.29
13	New Hanover	60,288,890	811,498	1.30	1.35
13	Caldwell	22,114,110	299,477	1.17	1.35
15	Buncombe	172,987,845	2,358,412	1.10	1.36
16	Cleveland	38,069,314	537,358	.88	1.41
17	Davidson	38,450,414	555,678	1.20	1.44
17	Person	12,854,446	184,158	1.25	1.44
19	Catawba	40,568,690	595,650	1.25	1.47
19	Iredell	46,208,284	678,920	1.35	1.47
19	Wilkes	18,622,286	273,656	1.40	1.47
19	Yadkin	9,288,424	136,847	1.25	1.47
23	Wilson	48,646,915	737,105	1.45	1.51
24	Stanly	31,810,997	482,242	1.40	1.52
25	Wake	96,921,396	1,493,310	.87	1.54
25	Watauga	9,130,960	140,784	1.33	1.54
27	Davie	12,689,986	197,785	1.31	1.56
27	Hoke	9,971,698	156,247	1.20	1.56
27	Richmond	32,241,645	502,989	1.30	1.56
30	Haywood	23,270,022	371,608	1.30	1.60
30	Pasquotank	19,144,587	305,874	1.38	1.60
32	Wayne	49,012,146	791,071	1.10	1.61
33	Lee	14,562,323	236,391	1.10	1.62
34	Alexander	8,773,401	142,007	1.25	1.63
34	Chowan	10,106,264	164,689	1.52	1.63
36	Halifax	38,476,368	648,092	1.50	1.68
37	Beaufort	29,661,372	502,651	1.50	1.69
37	Moore	26,775,909	452,623	1.18	1.69
39	Gates	7,434,171	127,120	1.38	1.71
40	Orange	17,645,204	304,533	1.50	1.73

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* *News Letter,* vol. XV, no. 23.

TABLE XXVIII (Ch. XI) *Continued*

Rank	County	Assessed Valuation 1927	Total Tax Levy 1927-28	County-wide Rate	Average County and District Rate
41	Chatham	$ 18,537,924	$ 326,742	$1.37	$1.75
41	Pitt	48,800,242	855,867	1.35	1.75
43	Lincoln	16,392,037	292,778	1.59	1.78
44	Onslow	10,811,410	194,945	1.55	1.80
45	Edgecombe	34,241,701	625,906	1.00	1.83
45	Martin	15,939,883	291,628	1.33	1.83
45	Warren	13,422,519	245,964	.94	1.83
48	Anson	21,560,440	396,533	1.50½	1.84
49	Tyrrell	3,928,307	73,149	1.68	1.86
50	Granville	21,107,406	394,837	1.66	1.87
50	Henderson	29,603,409	554,439	1.60	1.87
50	Jones	6,610,800	123,833	1.35	1.87
50	McDowell	20,374,496	381,687	1.43	1.87
54	Alamance	33,035,787	631,134	1.70	1.91
54	Vance	20,292,993	388,601	1.80	1.91
56	Harnett	24,692,119	483,342	1.48	1.96
57	Stokes	13,029,210	257,166	1.79	1.97
58	Columbus	21,469,616	427,362	1.50	1.99
58	Lenoir	27,189,707	540,350	1.74	1.99
60	Rutherford	36,302,627	727,783	1.46	2.00
60	Swain	12,619,645	252,275	1.21	2.00
62	Dare	2,748,177	55,539	1.35	2.02
63	Graham	5,383,735	110,224	1.80	2.05
63	Rockingham	43,796,970	897,402	1.68	2.05
65	Ashe	11,951,353	240,100	1.87	2.07
65	Robeson	38,363,493	796,896	1.35	2.07
67	Perquimans	8,146,208	169,887	2.00	2.09
67	Sampson	22,511,314	471,569	1.60	2.09
69	Currituck	5,088,475	107,012	1.91	2.10
70	Bladen	13,980,646	294,469	1.46	2.11
71	Bertie	15,043,368	318,776	1.55	2.12
71	Greene	12,734,130	269,979	1.75	2.12
73	Washington	8,032,085	170,950	1.59	2.13
74	Caswell	8,530,530	184,701	1.93	2.16
75	Montgomery	15,462,438	337,559	1.86	2.18
76	Nash	33,893,373	742,945	1.35	2.19
76	Northampton	14,356,483	314,074	1.98⅔	2.19
78	Hertford	11,391,545	252,274	1.75	2.20
79	Jackson	10,644,946	235,749	1.75	2.21
80	Union	22,721,934	517,213	1.80	2.23
81	Craven	28,137,865	634,542	2.00	2.25
82	Mitchell	9,417,899	219,623	1.52	2.33
83	Johnston	43,078,191	1,017,724	1.87	2.36
84	Carteret	15,092,468	358,156	2.30	2.37
85	Cumberland	29,922,133	711,397	1.80	2.38
85	Yancey	7,779,497	185,020	2.18	2.38
87	Franklin	14,799,052	362,106	1.21	2.45
88	Avery	6,002,525	149,449	2.15	2.49
89	Macon	7,315,848	184,487	1.58	2.52

TABLE XXVIII (Ch. XI) *Continued*

RANK	COUNTY	ASSESSED VALUATION 1927	TOTAL TAX LEVY 1927-28	COUNTY-WIDE RATE	AVERAGE COUNTY AND DISTRICT RATE
90	Duplin	$ 23,011,273	$ 582,286	$2.15	$2.53
91	Cherokee	8,978,208	229,028	1.55	2.55
92	Madison	10,606,877	271,613	2.05	2.56
93	Transylvania	11,685,923	300,963	2.40	2.58
94	Polk	8,110,065	200,526	1.95	2.60
95	Camden	3,389,841	91,948	1.81	2.71
96	Brunswick	10,059,954	274,139	2.50	2.72
97	Pender	10,104,118	285,115	1.99	2.82
98	Hyde	5,185,847	147,533	2.37¾	2.85
99	Pamlico	5,804,297	176,919	2.75	3.05
100	Clay	2,372,297	79,592	3.10	3.36

TABLE XXIX (Ch. XI)

FEDERAL INCOME TAXPAYERS, 1926

Rank	County	Number of Returns	Inhabs. per Return	Rank	County	Number of Returns	Inhabs. per Return
1	Mecklenburg	4,450	21	51	Johnston	270	210
2	Buncombe	3,290	24	52	Montgomery	70	214
3	Guilford	3,290	29	53	Warren	100	228
4	Durham	1,490	33	54	Washington	50	236
4	New Hanover	1,470	33	55	Anson	130	239
6	Wake	2,360	37	56	Hertford	70	244
7	Forsyth	2,320	43	57	Harnett	140	245
7	Henderson	470	43	58	Randolph	135	246
9	Pasquotank	400	44	59	Columbus	130	248
10	Edgecombe	950	46	60	Northampton	95	253
11	Alamance	530	68	61	Hoke	45	296
12	Wilson	640	71	62	Wilkes	115	304
13	Moore	350	73	63	Bertie	80	312
14	Cumberland	540	74	64	Pamlico	30	313
15	Rowan	670	75	65	Duplin	110	317
16	Gaston	850	77	66	Franklin	90	318
17	Richmond	370	85	67	Martin	70	340
18	Craven	370	88	68	Mitchell	35	343
18	Vance	330	88	69	Jackson	40	345
20	Wayne	570	90	70	Swain	45	355
21	Chowan	120	92	71	Dare	15	360
22	Catawba	422	94	72	Alexander	35	366
23	Lenoir	380	95	73	Brunswick	40	382
24	Iredell	420	99	74	Macon	35	389
25	Cabarrus	410	100	75	Cherokee	40	408
26	Lee	150	103	76	Chatham	60	416
27	Polk	95	105	77	Stokes	50	420
28	Carteret	160	106	78	Davie	30	460
29	Surry	320	107	79	Currituck	15	500
30	Davidson	380	108	80	Tyrrell	10	510
31	Beaufort	285	109	81	Sampson	80	522
32	Pitt	480	114	82	Nash	90	534
33	Caldwell	180	118	83	Bladen	40	538
34	Halifax	440	124	84	Graham	9	550
35	Rockingham	400	129	85	Watauga	25	573
36	Scotland	120	132	86	Camden	10	575
37	Haywood	190	136	87	Onslow	25	612
38	McDowell	140	141	88	Pender	20	760
39	Transylvania	80	142	89	Madison	25	816
40	Orange	140	147	90	Hyde	10	860
41	Burke	160	157	91	Greene	20	954
42	Granville	170	167	92	Gates	10	1,062
43	Person	115	178	93	Jones	10	1,100
44	Lincoln	100	185	94	Avery	10	1,110
45	Perquimans	60	186	95	Caswell	15	1,130
46	Rutherford	180	191	96	Yadkin	15	1,150
47	Stanly	180	193	97	Alleghany	5	1,600
48	Cleveland	200	195	98	Yancey	10	1,800
49	Robeson	320	197	99	Ashe	10	2,288
50	Union	190	203	100	Clay	1	5,400

TABLE XXX (Ch. XI)

PUBLIC DEBT IN NORTH CAROLINA, JUNE 30, 1928

Total county debt, $161,646,767; township and special districts, $45,189,360; cities and towns, $178,064,665. Total sinking fund, $13,100,782. Net state debt, $148,861,332. Aggregate net debt, $520,661,342.

Rank	County	County-wide	District and Township	Per Cent of County Valuation	City and Town	Per Cent of City and Town Valuations
1	Forsyth	$3,108,000	$2,416,000	2.7	$16,301,450	11.2
2	Currituck	124,280	19,600	2.9	....	...
2	New Hanover	1,732,812	....	2.9	3,888,604	8.4
4	Mecklenburg	4,135,520	2,012,000	3.1	10,322,227	6.9
5	Hoke	284,207	58,500	3.5	151,522	7.9
6	Cabarrus	1,388,133	256,000	3.6	1,264,000	8.1
7	Davidson	767,640	744,750	3.7	5,497,668	31.0
8	Guilford	5,630,118	2,191,000	4.0	22,067,095	10.2
8	Warren	234,410	303,500	4.0	104,500	24.3
10	Cleveland	477,250	1,091,554	4.1	1,668,192	9.5
10	Gaston	2,581,702	1,515,500	4.1	4,499,842	8.7
10	Gates	302,700	....	4.1	24,000	7.1
13	Anson	882,775	4,000	4.2	481,000	9.6
13	Rowan	1,767,200	922,000	4.2	4,227,119	11.8
15	Richmond	1,043,700	305,000	4.3	1,410,378	13.8
16	Alleghany	225,585	....	4.6	....	...
16	Durham	2,550,002	1,892,130	4.6	13,533,092	16.3
18	Northampton	456,125	225,500	4.7	42,000	2.7
19	Davie	510,350	98,500	5.0	....	...
20	Caldwell	822,550	317,000	5.2	679,500	5.5
20	Orange	726,675	180,000	5.2	423,428	6.6
22	Chowan	445,696	83,000	5.3	167,400	3.8
22	Scotland	621,150	231,050	5.3	551,644	12.7
24	Catawba	2,194,750	285,500	5.8	2,489,100	11.6
24	Lee	580,695	307,000	5.8	824,621	12.9
24	Yadkin	508,910	39,000	5.8	24,000	3.1
27	Burke	1,031,835	383,000	6.0	666,739	7.3
28	Wayne	1,921,000	1,030,500	6.1	2,224,250	11.9
29	Nash	1,502,600	529,962	6.2	2,071,200	7.8
29	Robeson	1,583,000	801,000	6.2	1,679,547	15.5
31	Surry	1,323,600	577,000	6.3	1,456,475	10.9
31	Wake	3,733,975	2,179,500	6.3	6,974,433	12.2
33	Alexander	494,690	74,000	6.4	230,000	21.9
33	Union	1,243,075	190,000	6.4	1,326,900	19.0
35	Caswell	569,450	....	6.5	....	...
35	Onslow	774,705	....	6.5	67,000	5.9
37	Pitt	2,651,350	625,900	6.6	1,740,200	10.2
37	Granville	1,271,000	145,000	6.6	720,268	12.6
37	Halifax	1,989,800	585,500	6.6	1,388,175	14.6
40	Vance	880,296	504,625	6.7	1,032,007	13.8

TABLE XXX (Ch. XI) *Continued*

Rank	County	County-wide	District and Township	Per Cent of County Valuation	City and Town	Per Cent of City and Town Valuations
41	Graham	$ 437,857	$ 40,000	6.8	$ 38,199	12.4
41	Stanly	2,073,750	156,000	6.8	1,060,997	14.2
43	Hertford	648,148	120,348	6.9	249,000	8.5
43	Watauga	576,000	54,000	6.9	390,787	18.0
45	Sampson	1,524,850	....	7.0	468,020	17.2
46	Edgecombe	1,700,880	839,500	7.3	826,434	10.6
46	Randolph	1,973,850	25,000	7.3	788,800	10.4
48	Person	785,400	94,300	7.4	924,000	27.4
49	Chatham	1,252,310	119,000	7.5	716,000	26.3
49	Moore	847,461	409,500	7.5	867,625	12.9
51	Lincoln	1,169,950	755,000	7.9	602,000	11.9
52	Alamance	2,350,894	370,534	8.1	3,793,500	23.7
52	Pasquotank	1,068,150	450,000	8.1	2,048,356	19.2
54	Haywood	1,436,550	388,755	8.2	1,554,940	16.2
54	Pender	646,077	210,000	8.2	10,500	.7
56	Camden	94,650	186,000	8.3	....	...
56	Harnett	1,581,105	430,000	8.3	822,750	14.4
58	McDowell	1,202,700	485,700	8.4	455,000	11.5
59	Perquimans	702,850	....	8.7	201,000	13.8
60	Beaufort	2,096,270	490,800	8.8	1,476,000	15.0
60	Stokes	1,093,760	18,000	8.8	300,000	40.2
62	Wilkes	1,470,400	28,500	9.0	596,000	11.3
63	Columbus	1,751,125	239,584	9.3	416,621	8.0
63	Wilson	3,370,481	1,260,000	9.3	2,487,891	10.1
65	Bertie	1,264,150	128,781	9.4	521,150	12.8
65	Martin	1,294,030	210,000	9.4	506,500	12.3
67	Greene	1,127,350	88,000	9.5	264,500	15.0
68	Rutherford	2,934,224	632,000	9.9	2,191,500	21.7
69	Franklin	796,250	679,500	10.0	605,178	19.5
70	Bladen	950,700	436,317	10.1	81,000	4.4
71	Iredell	4,218,345	659,500	10.3	2,288,545	10.6
71	Johnston	3,593,560	713,000	10.3	1,381,282	13.6
73	Rockingham	4,023,971	520,300	10.4	1,639,391	11.3
74	Montgomery	1,476,650	484,000	10.8	738,147	15.4
75	Mitchell	690,600	290,000	10.9	88,000	5.9
76	Swain	1,163,420	250,000	11.2	441,000	30.2
77	Lenoir	2,609,247	580,500	11.5	937,500	7.1
77	Polk	760,572	153,500	11.5	556,677	22.1
79	Duplin	2,689,750	38,000	11.9	277,606	6.5
80	Madison	1,188,550	65,000	12.0	149,500	21.3
81	Avery	702,290	....	12.4	100,500	30.8
82	Ashe	1,478,250	....	12.5	3,600	1.8
83	Cumberland	3,092,525	691,000	12.8	1,693,500	12.4
84	Jones	750,700	81,000	12.9	642,549	7.5
85	Buncombe	15,330,350	6,795,000	13.2	21,508,207	20.9
85	Macon	831,775	185,000	13.2	547,972	29.8

TABLE XXX (Ch. XI) *Continued*

Rank	County	County-wide	District and Township	Per Cent of County Valuation	City and Town	Per Cent of City and Town Valuations
87	Craven	$3,433,100	$259,000	13.3	$1,482,400	9.7
87	Jackson	1,351,775	71,250	13.3	387,000	17.0
87	Washington	880,420	182,120	13.3	389,922	25.9
90	Cherokee	669,260	593,000	13.7	788,291	25.2
90	Yancey	1,041,971	....	13.7	214,000	20.6
92	Tyrrell	556,078	....	14.1	86,000	...
93	Henderson	3,438,750	613,000	14.5	3,630,201	33.2
94	Hyde	770,629	5,000	15.0	4,000	...
95	Dare	481,625	....	18.7	10,000	4.1
96	Transylvania	1,812,200	....	19.0	709,700	19.0
97	Brunswick	1,788,176	140,000	19.9	132,242	13.4
98	Pamlico	1,121,985	7,000	20.8	35,500	3.9
99	Clay	526,694	....	22.4	25,000	18.6
100	Carteret	3,607,322	23,000	24.8	1,940,251	31.2

TABLE XXXI (Ch. XII)*

FARM POPULATION RATIOS, 1920

The actual farm population of the United States was 31,614,269, or 29.9 per cent of the total population. The actual farm population in North Carolina was 1,501,227.

Rank	State	Per Cent Total Pop. on Farms	Rank	State	Per Cent Total Pop. on Farms
1	Rhode Island	2.5	25	Wisconsin	35.0
2	Massachusetts	3.1	26	Vermont	35.5
3	New Jersey	4.6	27	Missouri	35.6
4	Connecticut	6.8	28	Minnesota	37.6
5	New York	7.7	29	Iowa	41.0
6	Pennsylvania	10.9	30	Montana	41.1
7	California	15.1	31	Kansas	41.7
8	Illinois	16.9	32	Louisiana	43.7
9	New Hampshire	17.2	33	New Mexico	44.8
10	Maryland	19.3	34	Nebraska	46.1
11	Ohio	19.8	34	Virginia	46.1
12	Nevada	20.9	36	Idaho	46.5
12	Washington	20.9	37	Texas	48.8
14	Delaware	23.0	38	Oklahoma	50.2
15	Michigan	23.1	39	Kentucky	54.0
16	Maine	25.7	40	Tennessee	54.4
17	Arizona	27.1	41	Alabama	56.9
18	Oregon	27.3	41	South Dakota	56.9
19	Colorado	28.3	43	Georgia	58.2
20	Florida	29.1	*44*	*North Carolina*	*58.7*
21	Indiana	31.0	45	North Dakota	61.0
22	Utah	31.2	46	South Carolina	63.8
23	West Virginia	32.7	47	Arkansas	65.5
24	Wyoming	34.6	48	Mississippi	71.0

* *News Letter*, vol. IX, no. 33.

TABLE XXXII (Ch. XII)*

COUNTRYSIDE POPULATIONS IN NORTH CAROLINA, 1920

United States average of countryside dwellers 38.8 per cent; North Carolina average 71.4 per cent against 76.2 per cent in 1910.

Rank	County	Per Cent Country	Rank	County	Per Cent Country
1	New Hanover	16.8	46	Hertford	81.3
2	Forsyth	35.8	47	McDowell	81.5
3	Mecklenburg	37.4	48	Randolph	82.0
4	Durham	48.5	49	Perquimans	82.1
5	Rowan	48.9	50	Burke	82.2
6	Pasquotank	49.4	51	Anson	82.3
7	Gaston	50.5	52	Pamlico	82.4
8	Craven	51.2	53	Granville	82.6
9	Buncombe	53.0	53	Moore	82.6
10	Carteret	53.6	55	Johnston	82.7
11	Guilford	55.3	56	Stanly	82.9
12	Catawba	57.4	57	Person	83.0
13	Wake	58.1	58	Duplin	83.1
14	Lenoir	61.6	59	Harnett	83.8
15	Wayne	63.6	60	Rutherford	84.3
16	Wilson	65.4	61	Tyrrell	84.7
17	Edgecombe	66.0	62	Franklin	86.0
18	Iredell	66.2	63	Sampson	86.2
19	Davidson	67.3	63	Jones	86.2
20	Lee	67.7	65	Orange	86.9
21	Alamance	67.9	66	Northampton	87.7
22	Cumberland	68.1	67	Beaufort	87.8
23	Cabarrus	68.3	68	Chatham	88.0
24	Richmond	68.4	69	Rockingham	88.2
25	Caldwell	68.7	70	Yadkin	88.4
26	Washington	70.4	71	Jackson	88.5
27	Nash	71.5	71	Warren	88.5
28	Pitt	72.4	73	Onslow	88.9
29	Cleveland	73.7	74	Davie	89.3
30	Chowan	74.0	75	Hoke	89.4
31	Surry	75.2	76	Avery	89.6
31	Martin	75.2	77	Pender	89.7
33	Lincoln	75.5	78	Mitchell	89.8
34	Montgomery	75.6	79	Macon	90.0
35	Transylvania	76.5	80	Wilkes	90.2
36	Haywod	77.0	81	Swain	90.7
37	Halifax	77.3	82	Alexander	90.9
37	Bertie	77.3	83	Madison	92.1
39	Columbus	77.8	84	Dare	92.3
40	Scotland	78.4	85	Greene	92.5
41	Cherokee	78.9	86	Bladen	92.7
42	Robeson	79.5	87	Camden	92.9
43	Henderson	79.6	88	Brunswick	93.0
43	Union	79.6	89	Clay	94.4
45	Polk	79.8	90	Watauga	94.7

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* *News Letter,* vol. VII, no. 4.

TABLE XXXII (Ch. XII) *Continued*

Rank	County	Per Cent Country	Rank	County	Per Cent Country
91	Stokes	96.1	95	Hyde	97.7
92	Ashe	96.4	97	Alleghany	97.8
93	Caswell	97.6	98	Yancey	100.0
93	Vance	97.6	98	Gates	100.0
95	Graham	97.7	98	Currituck	100.0

TABLE XXXIII (Ch. XIII)*

COST OF STATE GOVERNMENT, 1927

The table covers all current payments for operation and maintenance of the general departments of the state governments. The total payments for operating and maintaining the general departments of our state government amounted to $18,142,100. This includes the school equalization expenditures.

Rank	State	Per Inhabitant	Rank	State	Per Inhabitant
1	Nevada	$27.44	25	Louisiana	$10.17
2	Wyoming	22.53	26	Idaho	9.67
3	Delaware	19.16	27	Massachusetts	9.60
4	Utah	15.45	28	Iowa	9.50
5	Washington	14.64	29	Virginia	9.38
6	Maine	14.08	30	Rhode Island	9.21
7	Vermont	13.93	31	Pennsylvania	8.52
8	California	13.81	32	Montana	8.41
9	Minnesota	13.75	33	Indiana	8.32
10	Oregon	13.50	34	Nebraska	7.90
11	South Dakota	13.15	35	Kansas	7.82
12	North Dakota	13.14	36	West Virginia	7.70
13	Arizona	13.12	37	Oklahoma	7.30
14	New Hampshire	13.01	38	Kentucky	7.10
15	New York	12.73	39	South Carolina	6.95
16	New Mexico	12.61	40	Arkansas	6.90
17	Connecticut	12.40	41	Mississippi	6.83
18	New Jersey	11.86	42	Missouri	6.81
19	Michigan	11.84	43	Tennessee	6.49
20	Maryland	11.37	44	Alabama	6.37
21	Wisconsin	10.71	*45*	*North Carolina*	*6.31*
22	Florida	10.61	46	Ohio	6.29
23	Texas	10.55	47	Georgia	6.26
24	Colorado	10.42	48	Illinois	6.07

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* *News Letter,* vol. XV, no. 10.

TABLE XXXIV (Ch. XV)*

THE COST OF PUBLIC EDUCATION PER PUPIL, 1925-26

Capital outlays and debt service expenditures are not included. The average cost for all the states was 48 cents.

Rank	State	Annual	Daily
1	Nevada	$115.97	$.79
2	Wyoming	106.45	.74
3	Arizona	87.99	.70
4	California	94.27	.68
5	Colorado	89.59	.65
5	Iowa	91.68	.65
5	Montana	94.94	.65
8	New Jersey	95.05	.64
9	New York	97.97	.61
10	Michigan	87.88	.58
10	S. Dakota	82.07	.58
12	Ohio	82.34	.56
12	Washington	79.19	.56
14	Idaho	71.19	.54
14	Minnesota	77.28	.54
14	New Hampshire	82.09	.54
14	North Dakota	75.18	.54
14	Oregon	81.27	.54
19	Connecticut	77.98	.52
19	Illinois	79.91	.52
19	Massachusetts	81.23	.52
22	Indiana	79.94	.50
22	Kansas	72.91	.50
24	Pennsylvania	74.39	.49
25	Nebraska	$72.57	$.48
26	Delaware	72.73	.47
27	Wisconsin	71.47	.46
28	Vermont	66.34	.45
29	Rhode Island	68.05	.43
30	Utah	59.74	.42
31	Florida	45.51	.41
31	New Mexico	55.82	.41
31	Oklahoma	42.01	.41
34	Missouri	55.27	.40
35	Maine	61.34	.39
35	Maryland	59.18	.39
35	Texas	44.79	.39
38	Louisiana	39.36	.35
39	*N. Carolina*	*32.10*	*.30*
40	Virginia	31.97	.26
41	Kentucky	27.18	.25
41	S. Carolina	26.08	.25
41	Tennessee	26.59	.25
44	Alabama	22.65	.23
45	Arkansas	21.20	.21
45	West Virginia	27.22	.21
47	Georgia	22.07	.20
47	Mississippi	20.38	.20

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* *News Letter,* vol. XIV, no. 47. Based on *State School Facts,* vol. IV, no. 24.

TABLE XXXV (Ch. XV)*

COMPULSORY EDUCATION IN THE UNITED STATES, 1923-24

Rank	State	Age of Compulsory Attendance	Months of Attendance Required**	Average Days Attended Yearly by Each Child Enrolled
1	Rhode Island	7—16	81	164.1
2	New Jersey	7—16	81	157.6
3	New York	7—16	(99) 81	156.5
4	Maine	7—17	75	155.1
5	Indiana	7—16	54	152.6
6	Illinois	7—16	(77) 63	151.8
7	Connecticut	7—16	85½	150.8
8	Pennsylvania	8—16	64	150.2
9	Kansas	7—16	72	150.0
9	Wisconsin	7—16	72	150.0
11	Massachusetts	7—16	72	149.3
12	Ohio	6—18	94	149.2
13	Iowa	7—16	72	148.3
14	Oregon	9—15	(72) 48	147.8
15	Maryland	7—17	90	147.2
16	Delaware	7—17	80	147.0
17	Vermont	8—16	68	144.9
18	Utah	8—18	50	142.7
19	Michigan	7—16	(70) 63	141.4
20	Minnesota	8—16	56	141.2
21	Montana	8—16	(90) 72	139.8
22	Nebraska	7—16	81	139.7
23	South Dakota	8—17	72	139.3
24	Wyoming	7—16	72	139.2
25	New Hampshire	8—16	72	139.1
26	Washington	8—16	64	138.4
27	Nevada	7—18	88	138.2
28	North Dakota	7—17	70	136.2
29	Missouri	7—16	(88) 72	134.0
30	West Virginia	7—16	72	128.2
31	Colorado	8—16	48	126.3
32	California	8—16	(80) 64	125.2
33	New Mexico	6—16	70	124.8
34	Arizona	8—16	64	123.2
35	Idaho	8—18	70	122.1
36	Virginia	7—15	42	120.2
37	Kentucky	7—16	63	119.8
38	Louisiana	7—14	49	116.5
39	Texas	8—14	36	110.7
40	Oklahoma	8—18	30	110.3
41	Florida	7—16	36	106.3
42	*North Carolina*	*7—14*	*42*	*103.3*

* *News Letter,* vol. XV, no. 20. Based on Bulletin 20, U. S. Bur. of Ed., 1928.

** Numbers in parentheses indicate total number of months required where part-time schools are provided.

TABLE XXXV (Ch. XV) *Continued*

RANK	STATE	AGE OF COMPULSORY ATTENDANCE	MONTHS OF ATTENDANCE REQUIRED	AVERAGE DAYS ATTENDED YEARLY BY EACH CHILD ENROLLED
43	Georgia	8—14	36	102.2
44	Tennessee	7—16	72	101.2
45	Arkansas	7—15	48	97.9
46	Mississippi	7—16	36	93.0
47	Alabama	8—16	. .	92.8
48	South Carolina	8—14	42	82.6

TABLE XXXVI (Ch. XV)*

COMPOSITE RANK OF STATES IN PUBLIC EDUCATION, 1926

North Carolina ranks 40th in per cent enrollment in daily attendance; 43d in average school term in days; 40th in salaries paid teachers, supervisors, and principals; 40th in average value of school property per child enrolled; 38th in per cent of enrollment in high school; 40th in current expense per child enrolled.

Composite State Rank in All Items 1-5	State	Per Cent Enrollment in Daily Attendance	Average Term in Days	Average Salaries, Teachers, Supervisors	School Property per Child Enrolled	Per Cent Enrolled in High School	Per Capita Current Expense
1	New York	85.9	185.6	$2,025	$318	16.5	$97.97
2	Massachusetts	87.0	179.6	1,618	242	18.4	81.23
3	Indiana	92.3	173.8	1,361	245	23.1	79.94
3	Wisconsin	87.5	178.2	1,237	243	23.4	71.47
5	California	76.5	180.6	1,905	323	25.3	94.27
6	Illinois	83.0	184.9	1,515	243	17.7	79.91
7	Nevada	84.6	173.0	1,479	299	18.0	115.97
8	New Jersey	80.2	186.5	1,930	289	14.3	95.05
9	Michigan	80.8	188.5	1,510	276	14.6	87.88
10	Oregon	87.6	171.4	1,267	217	21.5	81.27
11	Connecticut	83.0	181.6	1,572	260	12.9	77.98
12	Washington	79.8	178.8	1,515	208	21.4	79.19
13	Rhode Island	83.6	190.0	1,478	208	13.4	68.05
14	Pennsylvania	83.8	180.7	1,468	227	14.5	74.39
15	Wyoming	84.1	170.2	1,143	274	19.3	96.45
16	New Hampshire	87.2	174.2	1,164	226	16.9	82.09
17	Iowa	80.2	176.0	1,241	233	20.1	91.68
18	Montana	84.3	174.1	1,096	232	17.9	94.94
19	Delaware	83.6	184.3	1,356	176	14.5	72.73
19	Maine	88.5	176.3	844	185	18.2	61.34
21	Nebraska	81.9	183.0	1,047	202	18.4	72.57
22	Kansas	84.0	175.0	1,114	175	19.9	72.91
23	Colorado	77.0	178.0	1,290	231	17.6	89.59
23	Ohio	85.5	171.2	1,411	136	17.8	82.34
23	Utah	81.2	173.8	1,204	176	21.9	59.74
26	Maryland	81.3	186.0	1,353	147	12.6	59.18
26	Minnesota	81.0	178.3	1,215	247	15.3	77.28
28	Vermont	85.4	171.3	899	152	16.4	66.34
29	Idaho	80.0	165.0	1,134	178	18.6	71.19
30	Missouri	82.9	167.5	1,153	177	15.3	55.27
31	North Dakota	83.1	166.8	905	220	13.5	75.18
32	South Dakota	84.1	168.7	923	160	16.0	82.07
33	Arizona	75.7	165.5	1,575	150	12.7	87.99
34	Texas	85.3	134.7	837	120	16.1	44.79
35	West Virginia	80.3	164.7	1,072	161	9.4	57.65
36	New Mexico	77.2	175.0	1,028	109	9.3	55.82
37	Oklahoma	68.5	148.9	979	125	12.8	42.01
38	Florida	73.1	150.1	831	156	10.2	45.51

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* Based on Bulletin 39, U. S. Bur. of Ed.

TABLE XXXVI (Ch. XV) *Continued*

Composite State Rank in all Items 1-5	State	Per Cent Enrollment in Daily Attendance	Average Term in Days	Average Salaries, Teachers, Supervisors	School Property per Child Enrolled	Per Cent Enrolled in High School	Per Capita Current Expense
39	Louisiana	75.6	148.4	$ 892	$116	11.5	$39.36
40	Virginia	77.0	159.4	746	99	12.6	31.97
41	*North Carolina*	*74.0*	*146.1*	*781*	*101*	*10.3*	*32.10*
42	South Carolina	71.5	144.0	761	70	9.9	26.08
43	Tennessee	69.3	152.2	778	62	8.2	26.59
44	Georgia	74.4	144.8	684	59	9.5	22.07
45	Kentucky	66.3	164.3	777	61	7.9	27.18
46	Alabama	70.6	137.5	678	74	8.7	22.65
47	Mississippi	72.6	141.0	582	64	7.5	20.38
48	Arkansas	70.4	146.4	686	57	7.0	21.20
	U. S.	80.3	169.3	1,277	189	15.2	64.59

TABLE XXXVII (Ch. XV)*

RANK OF RURAL WHITE SCHOOL SYSTEMS, 1926-27

The score is the average of ten factors, five academic and five financial. A perfect score would be 100.

State average score for all white schools 66.6; for rural white schools 58.6; for city white schools 86.4.

Rank	County	Score All Factors Per Cent	Rank	County	Score All Factors Per Cent
1	New Hanover	84.8	40	Nash	62.2
2	Currituck	83.2	42	Lenoir	62.1
3	Pamlico	76.7	43	Rutherford	61.9
4	Vance	75.7	44	Anson	61.8
5	Durham	75.1	45	Richmond	60.7
5	Northampton	75.1	46	Hoke	60.5
7	Craven	74.3	47	Rockingham	60.4
8	Warren	73.9	48	Pitt	60.2
9	Wilson	73.4	49	Henderson	60.1
10	Buncombe	72.9	50	Alamance	60.0
11	Hertford	71.8	51	Chowan	59.9
12	Mecklenburg	70.5	51	Dare	59.9
13	Granville	70.2	53	Orange	59.8
14	Transylvania	70.0	54	Duplin	59.6
15	Edgecombe	69.4	55	Tyrrell	59.5
16	Camden	69.3	56	Moore	59.3
17	Hyde	69.0	57	Polk	59.1
17	Pender	69.0	58	Greene	58.9
17	Scotland	69.0	59	Avery	58.1
20	Washington	68.8	60	Lee	57.9
21	Halifax	68.7	60	Rowan	57.9
22	Cumberland	68.2	62	Beaufort	57.7
23	Pasquotank	67.2	63	Jackson	57.2
24	Forsyth	66.5	63	Johnston	57.2
25	Gaston	66.2	65	Iredell	56.9
26	Catawba	66.1	66	Davie	56.5
26	Robeson	66.1	67	Lincoln	56.3
28	Bladen	65.8	68	Chatham	56.1
29	Guilford	65.7	69	Columbus	56.0
30	Bertie	65.5	70	Harnett	55.9
31	Perquimans	64.0	71	Davidson	55.8
32	Montgomery	63.6	72	Haywood	55.7
33	Carteret	63.5	73	Sampson	55.6
34	Franklin	63.2	74	Onslow	55.2
34	Gates	63.2	74	Stanly	55.2
34	McDowell	63.2	76	Person	54.5
37	Wake	63.0	77	Alexander	53.8
38	Jones	62.4	77	Union	53.8
38	Wayne	62.4	79	Caldwell	53.1
40	Martin	62.2	80	Burke	52.9

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* *News Letter,* vol. XV, no. 6. Based on *State School Facts,* vol. V, no. 5.

TABLE XXXVII (Ch. XV) *Continued*

Rank	County	Score All Factors Per Cent	Rank	County	Score All Factors Per Cent
81	Randolph	52.3	91	Yancey	47.5
82	Clay	52.1	92	Mitchell	47.3
83	Cleveland	51.2	93	Stokes	46.9
84	Cabarrus	51.0	94	Watauga	46.2
85	Caswell	50.8	95	Brunswick	45.5
86	Graham	49.8	96	Surry	45.0
87	Swain	49.7	97	Ashe	44.9
88	Macon	49.1	98	Wilkes	44.3
89	Madison	48.8	99	Yadkin	44.1
90	Alleghany	47.9	100	Cherokee	39.7

TABLE XXXVIII (Ch. XV)*

GENERAL PROPERTY VALUATION FOR THE YEAR 1928-29

Per School Child in Average Daily Attendance

The following table is an excellent index of the relative ability of the counties to support public schools.

Rank	County	Value of Property	Rank	County	Value of Property
1	Forsyth	$11,245	45	Surry	$4,446
2	Buncombe	9,429	46	Jackson	4,411
3	Mecklenburg	9,319	47	Lee	4,339
4	Durham	9,031	48	Scotland	4,268
5	New Hanover	8,840	49	Polk	4,221
6	Guilford	8,716	50	Caldwell	4,162
7	Gaston	7,879	51	Chatham	4,144
8	Graham	6,654	52	Robeson	4,138
9	Cabarrus	6,324	53	Cumberland	4,124
10	Wake	6,165	54	Hoke	3,976
11	McDowell	6,053	55	Martin	3,965
12	Wilson	5,943	56	Greene	3,952
13	Vance	5,807	57	Carteret	3,936
14	Pasquotank	5,625	58	Camden	3,918
15	Henderson	5,534	59	Currituck	3,884
16	Wayne	5,499	60	Washington	3,873
17	Rowan	5,467	61	Person	3,821
18	Catawba	5,298	62	Nash	3,819
19	Pitt	5,215	63	Harnett	3,818
20	Transylvania	5,199	64	Lincoln	3,732
21	Iredell	5,188	65	Anson	3,703
22	Lenoir	5,061	66	Union	3,702
23	Halifax	5,048	67	Duplin	3,669
24	Moore	5,040	68	Hertford	3,634
25	Rutherford	4,994	69	Montgomery	3,628
26	Orange	4,971	70	Perquimans	3,436
27	Rockingham	4,953	70	Yancey	3,436
28	Craven	4,935	72	Tyrrell	3,410
29	Burke	4,904	73	Onslow	3,396
30	Alamance	4,884	74	Northampton	3,358
31	Edgecombe	4,873	75	Alexander	3,286
32	Swain	4,849	76	Gates	3,174
33	Stanly	4,837	77	Sampson	3,163
34	Richmond	4,813	78	Alleghany	3,156
35	Johnston	4,729	79	Madison	3,136
36	Haywood	4,691	80	Pender	3,126
37	Davie	4,645	81	Bertie	3,048
38	Cleveland	4,621	82	Warren	3,036
39	Granville	4,618	83	Columbus	3,010
40	Mitchell	4,586	84	Stokes	2,997
41	Davidson	4,560	85	Brunswick	2,966
42	Beaufort	4,504	86	Wilkes	2,962
43	Randolph	4,483	87	Jones	2,956
44	Chowan	4,485	88	Bladen	2,915

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* *News Letter,* vol. XIV, no. 45.

TABLE XXXVIII (Ch. XV) *Continued*

Rank	County	Value of Property	County Rank		Value of Property
89	Watauga	$2,898	95	Hyde	$2,637
90	Ashe	2,843	96	Pamlico	2,490
91	Franklin	2,801	97	Avery	2,469
92	Yadkin	2,791	98	Macon	2,409
93	Caswell	2,739	99	Dare	2,174
94	Cherokee	2,728	100	Clay	1,608

TABLE XXXIX (Ch. XV)*

INSTRUCTIONAL SERVICE COST PER WHITE RURAL PUPIL, 1926-27

Two factors largely determine cost of instruction: (1) length of school term, and (2) scholarship of teacher.

State average instructional cost per white rural pupil $24.87; per white city pupil $42.53. Rural range is from $41.14 to $15.81.

State average length of term: rural 141.8 days; city 178.8. Rural range is from 180 days to 122 days.

State average teachers' training index: rural 564.4; city 724.3. Rural range is from 697 to 409.

Rank	County	Average Term in Days	Cost	Rank	County	Average Term in Days	Cost
1	Northampton	160	$41.14	38	Dare	142	$26.91
2	New Hanover	180	39.75	39	Granville	151	26.84
3	Currituck	180	38.40	40	Wayne	154	26.59
4	Halifax	156	38.31	41	Martin	135	26.57
5	Hertford	153	38.00	42	Beaufort	129	26.54
6	Craven	150	37.38	43	Henderson	160	26.03
7	Durham	160	37.36	44	Anson	150	25.96
8	Transylvania	164	36.71	45	Montgomery	134	25.88
9	Vance	160	36.15	46	Tyrrell	131	25.81
10	Wilson	160	35.35	47	Forsyth	149	25.69
11	Pamlico	160	34.17	48	Rutherford	147	25.64
12	Warren	160	34.15	49	Franklin	150	25.41
13	Buncombe	146	33.78	50	Alexander	126	25.33
14	Washington	151	32.32	51	Rowan	133	25.32
15	Camden	160	31.73	52	Greene	141	25.30
16	Scotland	180	31.35	53	Gates	160	25.05
17	Hyde	146	31.28	54	McDowell	143	24.97
18	Gaston	158	31.01	55	Lenoir	158	24.93
19	Bertie	155	30.80	56	Chowan	149	24.92
20	Polk	133	30.66	57	Rockingham	130	24.90
21	Cumberland	154	30.53	58	Chatham	128	24.58
22	Pender	157	29.33	59	Orange	139	24.53
23	Mecklenburg	154	29.18	60	Onslow	130	24.24
24	Edgecombe	160	29.09	61	Columbus	135	24.19
25	Pasquotank	160	28.82	62	Jackson	144	24.09
26	Bladen	152	28.55	63	Duplin	147	23.91
27	Robeson	127	28.52	64	Person	130	23.37
28	Moore	131	28.44	65	Jones	140	23.36
29	Nash	159	28.13	66	Burke	128	23.31
30	Guilford	156	28.10	67	Iredell	127	22.88
31	Wake	150	28.08	68	Lee	138	22.85
32	Alamance	136	27.97	69	Harnett	128	22.51
33	Carteret	160	27.87	70	Haywood	145	22.23
34	Catawba	142	27.47	71	Davie	143	22.01
35	Perquimans	132	27.20	72	Richmond	154	21.90
36	Hoke	141	26.99	73	Davidson	131	21.88
36	Pitt	139	26.99	74	Caldwell	126	21.87

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* *News Letter,* vol. XV, no. 2. Based on *State School Facts,* vol. V, no. 2.

TABLE XXXIX (Ch. XV) *Continued*

Rank	County	Average Term in Days	Cost	Rank	County	Average Term in Days	Cost
75	Sampson	137	$21.60	88	Madison	137	$18.90
76	Swain	139	21.49	89	Cabarrus	125	18.43
77	Union	141	21.34	90	Mitchell	136	18.41
78	Johnston	148	21.13	91	Yancey	130	18.10
79	Lincoln	140	20.98	92	Clay	142	17.75
80	Avery	154	20.87	93	Stokes	127	17.52
81	Graham	142	20.68	94	Wilkes	125	17.12
82	Macon	138	20.51	95	Ashe	124	16.73
83	Randolph	125	20.10	96	Alleghany	126	16.69
84	Brunswick	125	19.56	97	Yadkin	122	16.67
85	Cleveland	128	19.47	98	Watauga	125	16.66
86	Caswell	124	19.33	99	Surry	126	16.21
87	Stanly	139	18.97	100	Cherokee	127	15.81

TABLE XL (Ch. XV)*

WHITE PUBLIC HIGH SCHOOL GRADUATES, 1926-1928

Total white enrollment for 1927-28 was 586,697; average annual white public high school graduates for the two-year period 10,972 (10,587 in 1926-27; 11,357 in 1927-28). State average annual enrollment per graduate 53.5.

Rank	County	Total Graduates	Av. Ann. Enrollment Per Graduate	Rank	County	Total Graduates	Av. Ann. Enrollment Per Graduate
1	Currituck	109	21.3	41	Jones	68	50.0
2	Pamlico	156	22.7	42	Alleghany	73	50.5
3	Granville	288	27.0	43	Tyrrell	38	50.8
4	New Hanover	397	28.5	44	Pitt	290	51.7
5	Northampton	191	30.0	44	Robeson	317	51.7
6	Richmond	370	31.2	44	Guilford	856	51.7
7	Hertford	113	32.3	47	Sampson	302	51.8
8	Warren	146	33.3	47	Jackson	156	51.8
8	Duplin	291	33.3	49	Wayne	313	52.2
10	Gates	97	34.9	50	Forsyth	622	52.3
11	Catawba	548	37.7	51	Orange	137	52.9
11	Cumberland	350	37.7	52	Beaufort	221	53.5
11	Moore	262	37.7	53	Chatham	162	53.9
14	Washington	90	38.2	54	Burke	200	54.6
15	Pasquotank	143	40.2	55	Cleveland	395	54.9
16	Craven	216	40.6	56	Polk	99	56.1
17	Iredell	477	41.0	57	Henderson	219	56.3
18	Bladen	161	41.6	58	Vance	136	56.9
19	Lee	158	41.9	59	Lincoln	169	57.4
20	Montgomery	170	42.0	60	Clay	52	57.5
21	Bertie	152	42.5	61	McDowell	155	57.7
22	Franklin	212	44.2	62	Wilson	235	58.1
23	Hyde	65	44.5	62	Lenoir	198	58.1
24	Anson	190	44.8	64	Nash	331	58.3
24	Wake	661	44.8	65	Martin	116	59.3
24	Mecklenburg	849	44.8	66	Onslow	109	59.4
27	Durham	432	44.9	67	Hoke	53	60.1
28	Pender	106	45.1	68	Transylvania	85	60.6
29	Chowan	76	45.2	69	Davie	106	61.3
30	Alamance	362	45.3	70	Randolph	264	61.6
31	Union	416	45.6	71	Carteret	115	62.2
32	Buncombe	859	47.1	72	Davidson	360	63.1
33	Scotland	102	47.5	73	Stanly	242	63.6
34	Rowan	500	47.6	74	Haywood	227	64.2
34	Perquimans	70	47.6	75	Rutherford	295	65.3
34	Camden	38	47.6	76	Caldwell	184	67.1
37	Person	146	47.8	77	Brunswick	79	67.5
38	Halifax	227	48.7	78	Yancey	123	71.1
39	Rockingham	405	49.0	79	Johnston	392	71.7
40	Alexander	140	49.9	80	Watauga	125	72.9

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* *News Letter*, vol. XV, no. 22.

TABLE XL (Ch. XV) *Continued*

Rank	County	Total Graduates	Av. Ann. Enrollment Per Graduate	Rank	County	Total Graduates	Av. Ann. Enrollment Per Graduate
81	Dare	34	75.7	91	Swain	95	84.2
82	Columbus	182	78.9	92	Yadkin	108	84.3
83	Gaston	430	79.1	93	Wilkes	196	93.6
84	Madison	145	80.3	94	Greene	56	99.0
85	Ashe	168	80.8	95	Mitchell	57	112.2
86	Edgecombe	104	81.0	96	Macon	69	113.7
87	Avery	84	81.7	97	Caswell	43	125.6
88	Cabarrus	212	82.2	98	Cherokee	69	130.3
89	Harnett	196	82.7	99	Graham	23	136.6
90	Surry	231	84.0	100	Stokes	56	205.6

TABLE XLI (Ch. XVI)*

ILLITERATE NATIVE WHITES

Ten Years Old and Over in 1910 and 1920

Average of white illiteracy in the United States, 3 per cent in 1910 and 2 per cent in 1920. The white illiterates in Denmark are only 2 per thousand inhabitants; in North Carolina they number 82 per thousand, or forty-one times as many. Almost nobody but the feeble-minded is illiterate in Denmark. Illiteracy does not mean feeble-mindedness in North Carolina as in Denmark—not yet at least, but some day in the early future it may have some such significance.

Rank	States	Per Cent Illit.		Rank	States	Per Cent Illit.	
		1920	1910			1920	1910
1	Montana	0.3	0.4	25	Ohio	0.9	1.5
1	Idaho	0.3	0.3	26	Indiana	1.3	2.1
1	Wyoming	0.3	0.3	27	Colorado	1.4	1.6
1	Utah	0.3	0.4	28	Vermont	1.5	1.9
1	Washington	0.3	0.3	29	Maine	1.6	2.0
6	Massachusetts	0.4	0.5	30	Delaware	1.8	2.9
6	Connecticut	0.4	0.6	30	Maryland	1.8	2.6
6	North Dakota	0.4	0.5	32	Missouri	2.0	2.9
6	South Dakota	0.4	0.4	33	Arizona	2.1	4.2
6	Minnesota	0.4	0.5	34	Oklahoma	2.3	3.3
6	Nebraska	0.4	0.6	35	Florida	2.9	5.0
6	Nevada	0.4	0.4	36	Texas	3.0	4.3
6	Oregon	0.4	0.4	37	Mississippi	3.6	5.2
6	California	0.4	0.5	38	Arkansas	4.5	7.0
15	New York	0.5	0.8	39	W. Virginia	4.6	6.4
15	Iowa	0.5	0.8	40	Georgia	5.4	7.8
17	New Jersey	0.6	0.9	41	Virginia	5.9	8.0
17	Kansas	0.6	0.8	42	Alabama	6.3	9.9
19	New Hampshire	0.7	1.1	43	S. Carolina	6.5	10.3
19	Rhode Island	0.7	1.3	44	Kentucky	7.0	10.0
19	Michigan	0.7	1.1	45	Tennessee	7.3	9.7
19	Wisconsin	0.7	0.9	*46*	*N. Carolina*	*8.2*	*12.3*
23	Pennsylvania	0.8	1.3	47	Louisiana	10.5	13.4
23	Illinois	0.8	1.3	48	New Mexico	11.6	14.9

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* *News Letter,* vol. IX, no. 21. Based on 13th and 14th Censuses.

TABLE XLII (Ch. XVI)*

DOES NORTH CAROLINA READ?

The Circulation of 47 Magazines in 1924

The total circulation in the United States of these 47 magazines was one copy for every 3.97 inhabitants.

Rank	States	Inhabitants Per Magazine	Rank	States	Inhabitants Per Magazine
1	California	1.84	25	Pennsylvania	3.87
2	Oregon	2.17	26	South Dakota	3.94
3	Washington	2.40	27	Arizona	3.95
4	Wyoming	2.42	28	Kansas	4.01
5	Nevada	2.79	29	Utah	4.03
6	Colorado	2.92	29	Wisconsin	4.03
7	New Hampshire	2.96	31	Delaware	4.16
8	Massachusetts	3.02	32	Missouri	4.20
9	Connecticut	3.07	33	Maryland	4.65
9	Michigan	3.07	34	North Dakota	4.80
11	Ohio	3.09	35	West Virginia	5.08
12	Vermont	3.14	36	Oklahoma	5.58
13	Maine	3.31	37	Texas	5.82
14	Iowa	3.32	38	New Mexico	6.18
15	Montana	3.37	39	Virginia	6.52
16	Florida	3.43	40	Kentucky	7.68
17	Nebraska	3.45	41	Tennessee	7.89
18	New York	3.51	42	Louisiana	7.94
19	New Jersey	3.54	*43*	*North Carolina*	*8.77*
20	Minnesota	3.60	44	Arkansas	9.07
21	Illinois	3.61	45	Georgia	10.28
22	Idaho	3.65	46	Alabama	10.76
23	Indiana	3.70	47	South Carolina	10.81
23	Rhode Island	3.70	48	Mississippi	12.49

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* *News Letter,* vol. XI, no. 22.

TABLE XLIII (Ch. XVI)*

READING DAILY NEWSPAPERS

In the United States, January, 1925

The table covers the total circulation of every daily paper printed in English published in the United States, 2,014 all told. The rank of states is arrived at by dividing the population of each state by the total number of copies of dailies published in each state.

Rank	State	Number of Papers	Inhabs. Per Paper
	Dist. of Col.	5	1.40
1	California	147	1.68
2	Massachusetts	73	1.77
3	New York	135	1.79
4	Missouri	67	2.05
5	Oregon	29	2.23
6	Ohio	134	2.42
7	Illinois	117	2.43
8	Washington	32	2.59
9	Maryland	15	2.73
10	Pennsylvania	159	2.78
11	Rhode Island	10	2.91
12	Michigan	57	3.04
13	Colorado	32	3.06
14	Indiana	119	3.16
15	Connecticut	34	3.30
16	Nebraska	25	3.35
17	Minnesota	36	3.45
18	Iowa	49	3.77
19	Utah	6	4.22
20	Wisconsin	46	4.47
21	New Jersey	36	4.70
22	Florida	35	4.82
23	Kansas	59	4.88
24	Maine	11	4.96
25	Delaware	3	4.99
26	Tennessee	20	5.05
27	Arizona	16	5.19
28	Texas	100	5.32
29	Nevada	7	5.52
30	Oklahoma	48	5.56
31	Montana	18	5.91
32	Vermont	10	6.13
33	Kentucky	30	6.63
34	Louisiana	16	6.71
35	West Virginia	30	7.00
36	New Hampshire	10	7.35
37	South Dakota	16	7.37
38	Wyoming	6	7.54
39	Virginia	29	7.68
40	Idaho	13	8.01
41	Georgia	26	8.43
42	Alabama	24	9.12
43	*North Carolina*	*42*	*9.74*
44	North Dakota	10	11.92
45	Arkansas	34	12.29
46	South Carolina	18	12.44
47	New Mexico	7	14.30
48	Mississippi	13	18.11

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* *News Letter,* vol. XI, no. 25. Based on govt. statements of circulation.

TABLE XLIV (Ch. XVI)*

BOOKS IN PUBLIC LIBRARIES IN THE UNITED STATES, 1924

Inhabitants per Volume and Per Cent Population Having Access

The states are ranked according to the number of inhabitants per volume in all public libraries having 5,000 volumes or more for the year 1924. Seventy-one per cent of all volumes in public libraries in North Carolina are in libraries with 5,000 or more volumes. School and college libraries are not considered, but only public libraries. United States average 1.47 inhabitants per volume. District of Columbia .062 inhabitant per volume, or about 16 volumes per inhabitant.

RANK	STATES	PER CENT POP. HAVING ACCESS	INHABS. PER VOLUME
1	Massachusetts	97.4	.460
2	New Hampshire	96.1	.464
3	Connecticut	90.2	.602
4	Vermont	82.6	.607
5	California	97.6	.609
6	Nevada	20.8	.65
7	Rhode Island	78.7	.68
8	Maine	71.3	.74
9	Delaware	59.6	.76
10	Wyoming	82.0	.78
11	New Jersey	80.6	.95
12	Oregon	64.4	1.02
13	New York	84.0	1.26
14	Indiana	66.4	1.35
15	Montana	48.9	1.421
16	Illinois	68.5	1.423
17	Iowa	40.6	1.48
18	Colorado	46.8	1.50
19	Michigan	65.2	1.51
20	Wisconsin	62.8	1.53
21	Minnesota	46.7	1.58
22	Ohio	69.9	1.63
23	Washington	58.0	1.67
24	Maryland	66.0	1.68
25	Utah	55.3	1.89
26	Idaho	30.6	2.32
27	Arizona	18.5	2.36
28	Missouri	44.1	2.37
29	Nebraska	35.6	2.53
30	Pennsylvania	58.8	2.73
31	South Dakota	24.9	2.93
32	Kansas	41.2	2.87
33	Tennessee	22.0	3.30
34	Kentucky	26.5	3.78
35	Oklahoma	25.6	5.09
36	North Dakota	17.4	5.51
37	Louisiana	28.2	5.65
38	Alabama	21.8	5.73
39	West Virginia	16.4	5.82
40	Florida	35.7	5.99
41	Virginia	24.7	6.85
42	Arkansas	11.2	6.89
43	Georgia	23.9	6.90
44	Mississippi	10.5	7.33
45	Texas	28.3	7.43
46	New Mexico	15.3	7.56
47	South Carolina	13.7	8.65
48	*North Carolina*	*21.7*	*11.17*

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* *News Letter,* vol. XI, no. 30. Based on *Educational Directory,* U. S. Bu. of Ed., Bulletin 1, supplemented by statistics from Patterson's *Educational Directory* for 1924, and by U. S. Census of 1920.

TABLE XLV (Ch. XVI)*

ILLITERATE WHITE MALES IN NORTH CAROLINA, 1920

21 years old and older

State average 10.95 per cent. The male white adult illiterates number 46,744, the female 43,990.

Rank	County	Per Cent	
		1920	1910
1	New Hanover	1.7	3.0
2	Mecklenburg	4.3	4.4
3	Hoke	5.4	. .
4	Guilford	5.5	9.6
5	Craven	6.3	8.8
6	Pender	6.4	9.8
6	Rowan	6.4	8.0
8	Buncombe	6.6	10.1
9	Moore	6.7	10.7
10	Brunswick	6.8	15.4
11	Chowan	7.3	14.9
11	Pamlico	7.3	12.5
13	Cumberland	7.7	12.6
13	Forsyth	7.7	12.0
13	Lee	7.7	11.7
16	Alamance	8.1	10.6
16	Durham	8.1	9.7
16	Beaufort	8.1	13.5
19	Warren	8.2	12.1
19	Washington	8.2	6.2
21	Halifax	8.3	10.3
22	Alleghany	8.5	11.2
22	Bertie	8.5	10.1
22	Harnett	8.5	14.5
25	Vance	8.6	9.0
25	Wayne	8.6	12.6
27	Richmond	8.7	9.5
28	Hyde	8.8	12.1
28	Iredell	8.8	9.1
30	Bladen	9.0	14.1
30	Catawba	9.0	12.5
32	Orange	9.3	11.3
33	Northampton	9.5	15.1
34	Davidson	9.6	15.2
34	Henderson	9.6	11.1
36	Chatham	9.7	13.7
36	Wake	9.7	11.5
38	Tyrrell	9.8	17.0
39	Carteret	10.2	15.6
39	Edgecombe	10.2	13.7
41	Macon	10.3	16.4
41	Pitt	10.3	15.3
43	Randolph	10.4	12.9
44	Martin	10.6	16.9
44	Transylvania	10.6	12.1
46	Anson	10.7	11.0
46	Cherokee	10.7	21.9
48	Granville	11.0	14.2
48	Union	11.0	13.0
50	Lincoln	11.1	14.3
51	Pasquotank	11.2	7.5
52	Dare	11.7	6.8
53	Franklin	11.8	13.8
54	Currituck	11.9	10.8
54	Robeson	11.9	14.3
56	Lenoir	12.0	15.7
56	Rutherford	12.0	16.1
58	Alexander	12.2	17.5
58	Stanly	12.2	17.3
60	Camden	12.3	18.0
61	Jones	12.4	15.8
62	Cabarrus	12.5	12.0
63	Perquimans	12.7	9.3
64	Gates	12.8	13.3
64	Nash	12.8	17.2
66	Johnston	12.9	17.6
66	McDowell	12.9	12.1
66	Sampson	12.9	17.5
69	Ashe	13.1	17.6
70	Rockingham	13.2	14.4
71	Clay	13.3	18.1
72	Scotland	13.4	17.9
73	Person	13.7	17.6
73	Polk	13.7	16.0
75	Cleveland	13.8	15.4
76	Montgomery	13.9	16.9
77	Columbus	14.1	20.1
78	Hertford	14.2	15.0
79	Gaston	14.5	14.0
80	Yadkin	14.6	19.6
81	Haywood	14.7	13.7
82	Madison	14.9	21.7
83	Watauga	15.0	16.1
84	Wilson	15.3	16.3
85	Duplin	15.6	18.0
86	Caswell	15.8	15.3

* *News Letter,* vol. VIII, no. 14. Based on U. S. Census for 1920.

TABLE XLV (Ch. XVI) *Continued*

Rank	County	Per Cent		Rank	County	Per Cent	
		1920	1910			1920	1910
87	Avery	15.9	...	94	Greene	17.7	18.9
87	Onslow	15.9	15.7	95	Swain	18.3	18.0
89	Caldwell	16.1	18.8	96	Surry	18.7	23.2
90	Mitchell	16.5	24.1	97	Graham	19.1	9.1
91	Davie	16.7	19.2	98	Yancey	20.0	21.7
92	Jackson	17.3	17.5	99	Stokes	20.6	26.9
93	Burke	17.4	18.2	100	Wilkes	20.8	22.7

Avery and Hoke formed since 1910.

TABLE XLVI (Ch. XVI)*

RANK OF COUNTIES IN READING 8 NATIONAL MAGAZINES, 1924

Rank	Counties	Inhabitants Per Magazine	Rank	Counties	Inhabitants Per Magazine
1	Buncombe	6.00	48	Davidson	23.84
2	Mecklenburg	6.22	49	Harnett	24.40
3	Guilford	6.34	50	Washington	24.91
4	New Hanover	8.13	51	Davie	25.08
5	Wake	8.56	52	Surry	25.11
6	Durham	9.21	53	McDowell	25.17
7	Edgecombe	9.91	54	Person	25.26
8	Moore	11.02	55	Jackson	26.14
9	Pasquotank	11.16	56	Warren	26.21
10	Rowan	11.17	57	Union	27.48
11	Cumberland	12.09	58	Anson	27.49
12	Richmond	12.54	59	Macon	28.07
13	Orange	12.76	60	Franklin	28.49
14	Gaston	12.96	61	Cherokee	28.85
15	Catawba	13.01	62	Hoke	28.90
16	Forsyth	13.26	63	Perquimans	29.38
17	Henderson	13.28	64	Johnston	30.14
18	Vance	13.88	65	Northampton	30.70
19	Lee	14.10	66	Camden	30.93
20	Iredell	14.20	67	Currituck	33.33
21	Craven	15.03	68	Dare	33.64
22	Cabarrus	15.30	69	Martin	35.24
23	Scotland	15.48	70	Pamlico	35.95
24	Lenor	16.21	71	Pender	36.15
25	Beaufort	16.58	72	Hertford	36.33
26	Wilson	16.79	73	Mitchell	37.14
27	Alamance	16.92	74	Columbus	37.16
28	Carteret	17.16	75	Madison	37.39
29	Wayne	17.57	76	Bertie	38.69
30	Rockingham	18.09	76	Swain	38.69
31	Burke	18.55	78	Duplin	38.72
32	Stanly	18.56	79	Watauga	41.08
33	Caldwell	18.60	80	Onslow	41.18
34	Transylvania	19.57	81	Gates	41.27
35	Rutherford	20.06	82	Chatham	41.79
36	Pitt	20.36	83	Brunswick	42.95
37	Halifax	20.39	84	Alexander	43.63
38	Haywood	20.40	85	Tyrrell	44.89
39	Cleveland	20.45	86	Bladen	45.01
40	Randolph	20.56	87	Avery	47.46
41	Montgomery	20.57	88	Greene	48.16
42	Robeson	21.07	89	Yancey	49.79
43	Chowan	21.73	90	Stokes	49.94
44	Hyde	22.01	91	Wilkes	50.44
45	Granville	22.17	92	Sampson	52.14
46	Polk	22.20	93	Clay	52.26
47	Lincoln	23.23	94	Nash	58.58

* *News Letter,* vol. XI, no. 27.

TABLE XLVI (Ch. XVI) *Continued*

RANK	COUNTIES	INHABITANTS PER MAGAZINE	RANK	COUNTIES	INHABITANTS PER MAGAZINE
95	Alleghany	58.75	98	Jones	67.14
96	Caswell	60.23	99	Ashe	68.44
97	Yadkin	61.76	100	Graham	87.78

TABLE XLVII (Ch. XVII)*

WHITE AND NEGRO DEATH RATES, 1925

State average death rates, whites 9.9 per 1000 white population; Negroes 15.2 per 1000 Negro population. Negro death rate exceeds white in 83 counties.

Rank	County	Death Rate	
		White	Negro
1	Graham	4.6	. . .
2	Yancey	5.0	13.3
3	Transylvania	5.8	6.3
4	Hyde	6.0	9.1
5	Clay	6.6	26.2
6	Cherokee	6.9	8.1
7	Stanly	7.1	12.5
7	Swain	7.1	18.8
9	Brunswick	7.2	10.7
10	Alleghany	7.3	3.0
10	Camden	7.3	15.0
12	Haywood	7.4	12.5
12	Watauga	7.4	17.6
14	Ashe	7.8	10.4
14	Moore	7.8	12.3
16	Catawba	8.0	20.5
16	Hoke	8.0	17.4
18	Harnett	8.1	11.7
19	Bladen	8.2	14.2
19	Cleveland	8.2	12.9
19	McDowell	8.2	17.8
19	Montgomery	8.2	16.4
19	Rockingham	8.2	14.6
24	Alamance	8.4	11.5
24	Caswell	8.4	10.7
26	Mitchell	8.5	. . .
26	Rowan	8.5	16.9
26	Stokes	8.5	8.0
29	Macon	8.6	7.1
30	Cabarrus	8.7	18.0
30	Madison	8.7	5.9
30	Pamlico	8.7	16.4
30	Union	8.7	15.3
30	Wilkes	8.7	14.5
35	Avery	8.8	3.2
35	Lincoln	8.8	18.4
37	Caldwell	8.9	11.3
38	Columbus	9.1	14.4
39	Anson	9.2	14.1
39	Chatham	9.2	16.9
39	Gates	9.2	8.4
39	Orange	9.2	12.6
43	Davidson	9.3	19.1
44	Bertie	9.4	16.7
45	Forsyth	9.5	17.8
45	Johnston	9.5	13.0
45	Northampton	9.5	11.3
48	Perquimans	9.6	11.1
48	Sampson	9.6	13.7
48	Yadkin	9.6	15.8
51	Davie	9.7	14.2
52	Iredell	9.8	15.7
53	Granville	9.9	10.6
54	Carteret	10.0	19.1
54	Onslow	10.0	9.5
54	Polk	10.0	12.3
54	Washington	10.0	18.3
58	Franklin	10.1	14.1
58	Greene	10.1	9.5
58	Richmond	10.1	14.8
61	Gaston	10.2	16.8
62	Lee	10.3	15.0
62	Rutherford	10.3	13.3
64	Craven	10.5	20.0
64	Halifax	10.5	13.0
66	Chowan	10.6	19.2
66	Randolph	10.6	14.4
68	Alexander	10.7	13.9
69	Duplin	10.8	10.2
69	Jones	10.8	8.9
69	Warren	10.8	14.0
72	Jackson	10.9	6.2
72	Mecklenburg	10.9	20.2
72	Robeson	10.9	12.1
72	Tyrrell	10.9	12.8
76	Surry	11.0	20.3
77	Martin	11.1	15.3
78	Beaufort	11.2	19.1
79	Pitt	11.3	14.4
80	Durham	11.4	27.6
80	Pasquotank	11.4	21.4
82	Dare	11.5	8.4
82	Edgecombe	11.5	14.5
82	New Hanover	11.5	20.4
82	Pender	11.5	12.8
82	Vance	11.5	14.4
87	Guilford	11.6	22.3
87	Lenoir	11.6	15.3
87	Wilson	11.6	17.9
90	Currituck	12.0	19.7

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* *News Letter*, vol. XIII, no. 20.

TABLE XLVII (Ch. XVII) *Continued*

Rank	County	Death Rate White	Death Rate Negro	Rank	County	Death Rate White	Death Rate Negro
91	Person	12.4	10.9	96	Wayne	13.4	20.0
92	Nash	12.6	17.4	97	Hertford	13.6	15.2
93	Wake	12.8	18.4	98	Cumberland	14.4	9.9
94	Burke	12.9	11.4	99	Buncombe	15.9	26.7
95	Henderson	13.3	19.1	100	Scotland	16.2	13.5

TABLE XLVIII (Ch. XVII)*

INFANT AND MATERNAL MORTALITY RATES, 1925

In North Carolina a total of 6,591 children born alive died during the first year, a rate of 78.7 infant deaths per 1,000 live births. Maternal deaths reported were 690; the state maternal mortality rate was 8.2 per 1,000 live births.

Rank	County	Mortality Rate		Rank	County	Mortality Rate	
		Maternal	Infant			Maternal	Infant
1	Clay	6.7	13.4	44	Rockingham	6.5	68.4
2	Moore	7.7	24.8	44	Transylvania	. .	68.4
3	Cherokee	2.1	39.0	46	Lee	8.3	68.6
4	Brunswick	11.6	40.6	47	Chatham	8.1	68.7
5	Watauga	5.8	41.0	47	Cleveland	2.4	68.7
6	Burke	1.6	41.6	49	Johnston	11.5	69.3
7	Graham	. .	43.4	50	Ashe	2.9	70.2
8	Gates	7.4	44.9	51	Camden	10.1	70.7
9	Mitchell	2.4	48.3	52	Stanly	6.7	71.1
10	Granville	7.8	48.5	53	Halifax	8.1	71.7
11	Alamance	5.0	48.8	54	Perquimans	13.1	72.1
12	Haywood	3.5	49.1	55	Gaston	8.9	72.3
13	Yadkin	3.9	49.8	56	Buncombe	9.0	73.5
14	Stokes	1.5	50.0	57	Rowan	2.8	73.6
15	Alleghany	11.2	50.5	58	Carteret	14.3	73.9
15	Madison	5.4	50.5	59	McDowell	16.2	75.0
17	Onslow	11.3	52.1	60	Davidson	. .	75.4
18	Macon	5.6	53.8	61	Alexander	2.7	75.8
19	Yancey	. .	54.7	62	Vance	7.6	77.8
20	Caldwell	5.9	56.2	63	Bladen	7.9	78.0
21	Montgomery	3.8	58.4	64	Wake	11.8	78.6
22	Hyde	. .	58.8	65	Cabarrus	4.6	78.7
23	Wilkes	2.5	58.9	66	Harnett	9.9	79.8
24	Avery	5.4	59.6	67	Orange	3.3	81.3
25	Catawba	6.5	60.5	68	Robeson	11.2	81.6
26	Rutherford	6.3	60.7	69	Pamlico	11.8	82.6
27	Dare	12.1	60.9	70	Mecklenburg	11.6	83.9
28	Cumberland	13.6	61.6	71	Anson	14.4	84.0
29	Iredell	7.1	62.8	72	Guilford	10.6	85.3
30	Warren	10.7	63.0	73	Polk	16.7	87.8
31	Columbus	4.0	63.5	74	Beaufort	7.5	88.1
32	Union	7.4	63.6	75	Tyrrell	7.4	88.8
33	Jackson	1.8	64.5	76	Surry	5.0	91.1
34	Henderson	10.6	65.5	77	Davie	5.2	91.3
35	Swain	. .	65.6	78	Sampson	8.6	92.4
36	Person	6.0	66.4	79	Greene	8.0	93.0
37	Northampton	6.2	66.6	80	Duplin	3.2	95.1
37	Pender	16.0	66.6	81	Forsyth	6.1	97.7
39	Lincoln	4.1	66.9	82	Washington	5.9	97.9
40	Richmond	9.5	67.0	83	Martin	2.9	98.0
41	Jones	20.2	67.5	84	Pitt	10.6	100.6
42	Caswell	3.8	67.6	85	Lenoir	10.5	101.3
43	Randolph	5.7	68.2	86	Franklin	13.3	102.7

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* *News Letter,* vol. XIII, no. 21.

TABLE XLVIII (Ch. XVII) *Continued*

RANK	COUNTY	MORTALITY RATE		RANK	COUNTY	MORTALITY RATE	
		Maternal	Infant			Maternal	Infant
87	Durham	9.0	102.8	94	Wilson	14.0	114.9
88	Hoke	16.5	104.9	95	Chowan	2.5	115.0
89	Edgecombe	15.3	107.1	96	Scotland	13.5	116.5
90	New Hanover	8.3	107.2	97	Bertie	8.0	118.7
91	Nash	15.0	111.2	98	Currituck	17.8	119.0
92	Wayne	10.8	111.4	99	Craven	13.6	130.7
93	Hertford	7.1	111.5	100	Pasquotank	15.9	135.1

TABLE XLIX (Ch. XVII)*

BIRTHS ATTENDED BY MIDWIVES, 1925

State average 14.09 per cent of all white births, and 70.55 per cent of all Negro births attended by midwives.

Rank	County	Per Cent Births		Rank	County	Per Cent Births	
		Negro	White			Negro	White
1	Gaston	43.95	.69	45	Duplin	68.09	14.52
2	Alamance	17.44	1.11	46	Franklin	73.58	14.92
3	Guilford	39.08	1.34	47	Clay	00.00	14.96
4	Durham	48.35	1.77	48	Nash	64.24	15.02
5	Forsyth	68.31	1.82	49	Swain	36.36	15.67
6	Mecklenburg	75.00	2.09	50	Cumberland	77.52	15.87
7	Orange	37.44	2.63	51	Johnston	71.16	15.93
8	Buncombe	47.45	3.19	52	Henderson	46.96	16.10
9	Cleveland	58.51	3.22	53	Hoke	85.83	16.66
10	Rowan	59.29	3.77	53	Polk	68.57	16.66
11	Wake	63.05	4.70	55	Halifax	89.46	17.82
12	Wilson	66.14	4.94	56	Stanly	63.63	18.31
13	Iredell	66.83	5.04	57	Moore	60.06	18.67
14	New Hanover	73.91	5.05	58	Caldwell	70.45	18.80
15	Rutherford	42.40	5.29	59	McDowell	25.00	19.20
16	Pasquotank	75.09	5.88	60	Scotland	85.41	19.44
17	Lincoln	73.60	6.15	61	Harnett	76.66	19.88
17	Rockingham	50.87	6.15	62	Transylvania	00.00	20.00
19	Davidson	44.13	6.35	63	Montgomery	72.00	20.10
20	Edgecombe	73.95	6.60	64	Pamlico	85.18	20.54
21	Richmond	70.40	7.43	65	Northampton	87.65	20.57
22	Greene	62.12	7.45	66	Beaufort	72.18	21.24
23	Cabarrus	59.58	7.67	67	Jones	85.71	22.08
24	Wayne	59.84	8.22	68	Sampson	83.94	22.10
25	Vance	76.87	8.62	69	Craven	90.14	22.28
26	Haywood	00.00	8.89	70	Alleghany	50.00	22.50
27	Granville	59.90	9.03	71	Bertie	89.61	22.56
28	Anson	81.09	9.09	72	Hertford	85.09	23.65
29	Person	50.34	9.16	73	Cherokee	66.66	24.61
30	Yadkin	44.44	9.60	74	Perquimans	78.20	24.82
31	Chowan	70.98	10.14	75	Gates	86.95	26.35
32	Stokes	68.67	10.43	76	Alexander	75.75	26.48
33	Currituck	74.66	10.75	77	Camden	82.69	26.65
34	Pitt	73.27	11.22	78	Martin	90.13	26.91
35	Lee	78.06	11.65	79	Onslow	85.34	29.49
36	Randolph	55.17	11.71	80	Dare	100.00	29.65
37	Davie	67.53	11.76	81	Carteret	63.15	29.83
38	Robeson	74.57	11.87	82	Tyrrell	92.85	31.64
39	Lenoir	80.14	12.52	83	Watauga	00.00	31.95
40	Chatham	68.44	13.21	84	Yancey	20.00	32.33
41	Surry	21.05	13.75	85	Burke	72.22	33.50
42	Caswell	56.84	13.77	86	Jackson	53.84	34.92
43	Union	59.10	14.00	87	Warren	91.74	36.31
44	Catawba	50.45	14.43	88	Macon	16.66	36.71

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* *News Letter,* vol. XIII, no. 24.

TABLE XLIX (Ch. XVII) *Continued*

Rank	County	Per Cent Births		Rank	County	Per Cent Births	
		Negro	White			Negro	White
89	Washington	94.79	37.24	95	Wilkes	84.14	44.25
90	Mitchell	00.00	38.49	96	Hyde	79.88	45.34
91	Pender	97.03	38.84	97	Graham	00.00	49.27
92	Bladen	91.00	40.05	98	Columbus	84.94	49.62
93	Ashe	12.50	41.03	99	Madison	33.33	50.90
94	Avery	20.00	43.37	100	Brunswick	90.69	58.60

TABLE L (Ch. XVII)*

NORTH CAROLINA HOSPITALS

General Hospital Beds by Counties, December 31, 1926

In the 100 counties of the state there are 3,753 general hospital beds for white patients and 949 for colored patients. This is an average of 1.7 beds per 1,000 people or one bed for each 595 people. There are 30 counties which exceed this average, 26 counties which have fewer hospital beds than this average, and 44 counties which have no general hospitals at all. Of these 44, Moore County has a tuberculosis sanatorium with 72 beds, and Mitchell County has a special hospital with 20 beds. The other forty-two counties have no hospitals of any description.

Cumberland, Durham, New Hanover, Mecklenburg, and Buncombe are the only counties in the state with at least four hospital beds per 1,000 people. Hospital authorities consider this ratio fairly adequate. On the other hand, sixty counties of the state have less than one general hospital bed per 1,000 people, which is considered the minimum of acceptability.

Rank	County	General Hospital Beds	Population per Bed
1	Cumberland	195	197
2	Durham	228	206
3	New Hanover	205	226
4	Mecklenburg	394	229
5	Buncombe	311	237
6	Nash	179	257
7	Forsyth	371	262
8	Lee	56	264
9	Macon	50	268
10	Guilford	318	289
11	Wake	279	298
12	Transylvania	35	306
13	Iredell	125	323
14	Pasquotank	55	333
15	Vance	69	364
16	Lincoln	50	368
17	Richmond	80	369
18	Wilson	100	425
19	Lenoir	79	432
20	Surry	70	490
20	Henderson	40	490
22	Burke	50	492
23	Rutherford	64	523
24	Stanly	62	524
25	Gaston	115	528
26	Carteret	31	532
27	Avery	20	540
28	Union	68	557
29	Craven	56	561
30	Robeson	103	580
31	Beaufort	50	622
32	Wayne	75	653
33	McDowell	28	675
34	Polk	14	686
35	Swain	20	755
36	Anson	40	758
37	Rowan	60	807
38	Cleveland	46	815
39	Granville	30	933
40	Halifax	50	958
41	Cherokee	16	1,000
42	Madison	20	1,004
43	Edgecombe	40	1,050
44	Davidson	37	1,057
45	Catawba	35	1,080
46	Watauga	12	1,174
47	Alamance	30	1,180
48	Pitt	42	1,231
49	Harnett	26	1,246
50	Cabarrus	30	1,290
51	Ashe	17	1,312
52	Randolph	23	1,383
53	Caldwell	15	1,392
54	Wilkes	23	1,487
55	Johnston	35	1,546
56	Rockingham	30	1,643

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* *News Letter,* vol. XIV, no. 38. Adapted from table in report of Hospital Endowment Section of Duke Foundation.

TABLE LI (Ch. XVII)*

TOTAL AND INFANT MORTALITY RATES

By States for the Registration Area, 1927

While North Carolina's total death rate is almost exactly the average for all the states, only three states have higher infant mortality rates. Total births in North Carolina in 1927 numbered 83,334; infant deaths (under one year of age) 6,516. Total deaths, 32,764; total death rate, 11.3 per 1,000 inhabitants.

U. S. average death rate 11.4 per 1,000 estimated population. Infant death rate 64.3 per 1,000 births.

Rank	State	Death Rate		Rank	State	Death Rate	
		Total	Infant			Total	Infant
1	Oregon	11.4	47.5	20	Mississippi	12.8	65.7
2	Washington	10.2	49.7	21	Alabama	10.6	65.9
3	Idaho	7.1	50.0	22	Rhode Island	11.2	66.4
4	Nebraska	8.8	50.4	23	Montana	7.4	66.8
5	Minnesota	9.2	52.1	24	Florida	13.3	67.5
6	Kansas	10.2	55.4	25	New Hampshire	13.8	67.6
7	Iowa	10.1	55.7	26	Michigan	11.3	67.8
8	Indiana	12.0	58.8	27	Pennsylvania	11.4	69.0
9	Connecticut	10.2	59.0	28	Delaware	12.3	69.1
10	Wisconsin	10.1	59.3	29	Vermont	13.9	69.8
11	New York	12.3	59.4	30	Wyoming	8.2	69.9
12	Missouri	11.6	59.5	31	Tennessee	11.7	71.4
13	Kentucky	10.6	61.0	32	West Virginia	10.0	71.9
14	Arkansas	9.3	61.4	33	Virginia	11.2	74.6
14	New Jersey	11.2	61.4	*34*	*North Carolina*	*11.3*	*78.2*
16	Ohio	10.9	62.1	35	Maine	13.7	81.1
17	Calfornia	13.8	62.7	36	Maryland	13.2	81.6
18	North Dakota	7.6	63.5	37	Arizona	12.6	125.8
19	Illinois	11.4	64.4				

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* *News Letter,* vol. XIV, no. 5. Based on data released by U. S. Public Health Service.

TABLE LII

NORTH CAROLINA PROGRESS, 1900-1927*

Total Area, 52,426 Square Miles; Land, 48,740 Square Miles;
Water, 3,686 Square Miles

Item	1900	1910	1927
Population	1,893,810	2,206,287	2,897,000
Property, True Value	$681,982,000	$1,685,408,000[1]	$5,284,000,000
Assessed Value Property	$306,579,715	$613,000,000	$2,920,000,000
Manufactures			
Capital	$68,283,005	$217,185,588	....
Products, Value	$85,274,083	$216,656,055	$1,154,418,000
Cotton Manufacturing			
Capital	$33,012,000	$96,993,000	$286,323,000[2]
Products, Value	$28,373,000	$72,680,000	$425,437,522
Spindles, Number Active	1,134,909	3,163,199	6,094,136
Looms, Number Active	25,469	55,600	85,813
Cotton Consumed, Bales	404,535	754,483	1,654,773
Cottonseed Oil Mills			
Capital	....	$4,432,010	$14,586,456[2]
Products, Value	$2,676,871	$8,504,477	$17,707,000
Tobacco Manufacturing			
Value of Output	$13,851,000	$35,987,000	$413,274,000
Furniture Manufacturing			
Products, Value	$1,023,000	$1,547,000	$53,551,221
Lumber, Feet Cut	1,278,389,000	1,824,722,000	970,965,000
Minerals			
Products, Value	$1,458,848	$2,616,131	$10,993,000
All Land in Farms			
Acres	22,749,356	22,439,129	18,593,670
Improved Land, Acres	8,327,106	8,813,056	7,738,826
Number of Farms	224,637	253,725	283,482
Value All Farm Property	$233,834,693	$537,716,210	$1,050,015,835[3]
Farm Products, Value	$89,310,000	$176,262,000	$453,605,000
Farm Crops, Value	$68,625,000	$131,072,000	$361,605,000
Cotton Crop			
Acreage	1,007,000	1,478,000	1,727,000
Bales, Number	433,000	706,000	857,000
Value Lint	$15,697,000	$49,710,000	$83,558,000
Value Seed	$2,291,000	$9,666,000	$14,097,000
Tobacco Crop, Pounds	127,503,400	138,813,163	468,000,000
Value	$8,038,691	$13,847,559	$120,744,000
Acreage	203,023	221,890	650,000
Grain Crop			
Corn, Bushels	29,790,000	49,290,000	53,626,000
Wheat, Bushels	5,961,000	6,817,000	5,168,000
Oats, Bushels	5,046,000	4,022,000	5,733,000
Livestock, Number			
Cattle	625,000	701,000	527,000
Sheep	302,000	214,000	85,000
Swine	1,300,000	1,228,000	951,000

* Based mainly on the *Blue Book of Southern Progress,* Manufacturers Record, 1928, but supplemented from official sources.

[1] 1912. [2] 1920 Census. [3] 1925 Census.

TABLE LII *Continued*

ITEM	1900	1910	1927
Livestock, number—*Continued*			
Horses	159,000	166,000	105,000
Mules	136,000	175,000	282,000
Banking			
Aggregate Resources	....	$112,213,762	$503,958,000
Paid in Capital	....	$16,376,506	$38,240,000
Individual Deposits	$16,758,000	$67,285,654	$356,767,000
Railroad Mileage	3,831	4,932	5,337
Motor Vehicles, Number	....	6,178	430,499
Highway Expenditure	$624,381[4]	$5,215,491[5]	$28,250,000
Public Schools, Expenditure	$950,000	$3,037,000	$34,691,699[6]

[4] 1904. [5] 1914. [6] 1926.

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